

# CPC COOPERATIVE PATENT CLASSIFICATION

## G06T IMAGE DATA PROCESSING OR GENERATION, IN GENERAL (specially adapted for particular applications, [see the relevant subclasses, e.g. G06K, G09G, H04N](#))

### NOTES

1. This subclass covers:
  - arrangements for geometrically modelling objects, whether the final model is used for display of an image of the object or for some other purpose, such as manufacture of a corresponding object;
  - arrangements for analysing the geometric attributes of an image of an object.
2. This subclass does not cover:
  - reading or recognising printed or written characters or recognising patterns, e.g. fingerprints, which is covered by subclass [G06K](#);
  - modification of image data to allow display using multiple viewports, which is covered by subclass [G09G](#);
  - circuits for generating functions for visual indicators, which are covered by subclass [G09G](#);
  - scanning of documents or the like in pictorial communication, which is covered by subclass [H04N](#).

### WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[G06T 1/40](#)

covered by

[G06T 1/20](#)

#### 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 ([architectures of general purpose stored programme computers G06F 15/76](#))
- 1/60 . Memory management

#### 3/00 Geometric image transformation in the plane of the image, e.g. from bit-mapped to bit-mapped creating a different 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 . . {Demosaiicing, 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}
- 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, e.g. from bit-mapped to bit-mapped creating a similar image**
- 5/001 . {Image restoration}
- 5/002 . . {Denoising; Smoothing (noise processing or correction adapted to be used in an image pickup device containing and electronic image sensor [H04N 5/217](#), [H04N 5/357](#) - [H04N 5/365](#))}
- 5/003 . . {Deblurring; Sharpening (vibration or motion blur correction for cameras comprising an electronic image sensor [H04N 5/23264](#))}
- 5/004 . . . {Unsharp masking}
- 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](#))}
- 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 and electronic image sensor [H04N 9/045](#))}
- 5/007 . {Dynamic range modification (applied in cameras using an electronic image sensor [H04N 5/2355](#), [H04N 5/2356](#))}
- 5/008 . . {Local, e.g. shadow enhancement}
- 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](#))}
- 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](#))}
- 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](#))}
- 5/30 . . Erosion or dilatation, e.g. thinning
- 5/40 . by the use of histogram techniques {(applied in cameras using an electronic image sensor [H04N 5/23229](#), [H04N 5/235](#))}
- 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](#))}
- 7/00 Image analysis, e.g. from bit-mapped to non bit-mapped**
- 7/0002 . {Inspection of images, e.g. flaw detection ([G06T 7/004](#) takes precedence)}
- 7/0004 . . {Industrial image inspection}
- 7/0006 . . . {using a design-rule based approach}
- 7/0008 . . . {checking presence/absence}
- 7/001 . . . {using an image reference approach (image matching for pattern recognition or image matching in general [G06K 9/6203](#))}
- 7/0012 . . {Biomedical image inspection}
- 7/0014 . . . {using an image reference approach (image matching for pattern recognition or image matching in general [G06K 9/6203](#))}
- 7/0016 . . . . {involving temporal comparison (change detection in general [G06T 7/20](#))}
- 7/0018 . {Camera calibration, e.g. determining intrinsic or extrinsic parameters}
- 7/002 . . {Stereo camera calibration, e.g. determination of the transformation between left camera coordinate system and right camera coordinate system}
- 7/0022 . {Determining parameters from multiple pictures (depth or shape from stereo images [G06T 7/0075](#); depth or shape from multiple images [G06T 7/0065](#); stereo camera calibration [G06T 7/002](#))}
- 7/0024 . . {Registration of images, e.g. alignment of images (image matching for pattern recognition or image matching in general [G06K 9/6203](#))}
- 7/0026 . . . {using correlation-based methods}
- 7/0028 . . . {using feature-based methods}
- 7/003 . . . . {involving reference images or patches (image matching for pattern recognition or image matching in general [G06K 9/6203](#))}
- 7/0032 . . . . {involving models (model matching for pattern recognition [G06K 9/6204](#), [G06K 9/6878](#))}
- 7/0034 . . . {using statistical methods (image matching by comparing statistics of regions for pattern recognition [G06K 9/6212](#))}
- 7/0036 . . . {using transform-domain based approaches}
- 7/0038 . . . {Registration of image sequences}
- 7/004 . {Determining position or orientation of objects}
- 7/0042 . . {using feature-based methods}
- 7/0044 . . . {involving reference images or patches (image matching for pattern recognition or image matching in general [G06K 9/6203](#))}
- 7/0046 . . . {involving models (model matching for pattern recognition [G06K 9/6204](#), [G06K 9/6878](#))}
- 7/0048 . . {using statistical methods (image matching by comparing statistics of regions for pattern recognition [G06K 9/6212](#))}
- 7/0051 . {Depth or shape recovery}
- 7/0053 . . {from shading}
- 7/0055 . . {from specularities}
- 7/0057 . . {from laser ranging and structured images, e.g. interferometry (image acquisition and arrangements for measuring contours or curvatures of an object by projecting a pattern, thereupon [G01B 11/25](#))}
- 7/0059 . . {from texture}
- 7/0061 . . {from perspective effects, e.g. using vanishing points}
- 7/0063 . . {from line drawings}
- 7/0065 . . {from multiple images}
- 7/0067 . . . {from contours}
- 7/0069 . . . {from focus}
- 7/0071 . . . {from motion}
- 7/0073 . . . {from multiple light sources, e.g. photometric stereo}
- 7/0075 . . . {from stereo images}
- 7/0077 . . . . {from three or more stereo images}

- 7/0079 . . {Segmentation or edge detection (image analysis based on texture or colour features [G06T 7/40](#); motion-based segmentation [G06T 7/2006](#); separation of touching or overlapping patterns for pattern recognition [G06K 9/34](#); extraction of features or characteristics of the image for pattern recognition [G06K 9/46](#))}
- 7/0081 . . {Region-based segmentation (image analysis based on texture or colour features [G06T 7/40](#); separation of touching or overlapping patterns by cutting or merging for pattern recognition [G06K 9/342](#); quantising the analogue image signal for pattern recognition [G06K 9/38](#); extraction of features or characteristics of the image related to colour for pattern recognition [G06K 9/4652](#))}
- 7/0083 . . {Edge-based segmentation (detecting partial patterns or configurations [G06K 9/4604](#))}
- 7/0085 . . {Edge detection (detecting partial patterns or configurations [G06K 9/4604](#))}
- 7/0087 . . {involving probabilistic approaches, e.g. Markov Random Field [MRF] modeling (Markov models or related models or networks embedding Markov models for pattern recognition [G06K 9/6297](#); classification techniques based on a parametric, e.g. probabilistic, model [G06K 9/6277](#); detecting partial patterns or configurations by analysing connectivity relationship of elements of the pattern [G06K 9/4638](#))}
- 7/0089 . . {involving deformable models, e.g. active contour (pattern recognition techniques involving a deformation of the sample or reference pattern or elastic matching [G06K 9/6206](#))}
- 7/0091 . . {involving morphological operators (combinations of preprocessing functions using a local operator for pattern recognition [G06K 9/56](#))}
- 7/0093 . . {involving graph-based approaches (non-hierarchical partitioning techniques based on graph theory for pattern recognition [G06K 9/6224](#))}
- 7/0095 . . {involving transform domain approaches (detecting partial patterns, e.g. edges or contours, using the Hough transform for pattern recognition [G06K 9/4633](#))}
- 7/0097 . . {involving the use of two or more images}
- 7/20 . . Analysis of motion {(movement detection in television systems [H04N 5/144](#); motion estimation for digital video signal compression [H04N 19/51](#); recognizing scenes under surveillance and traffic patterns [G06K 9/00771](#), [G06K 9/00785](#))}
- 7/2006 . . {Motion-based segmentation}
- 7/2013 . . {using block-matching}
- 7/202 . . {using full search}
- 7/2026 . . {using non-full search, e.g. three step search}
- 7/2033 . . {using feature-based methods, e.g. corners, segments}
- 7/204 . . {involving reference images or patches (image matching for pattern recognition or image matching in general [G06K 9/6203](#))}
- 7/2046 . . {involving models (model matching for pattern recognition [G06K 9/6204](#), [G06K 9/6878](#))}
- 7/2053 . . {involving subtraction of pictures}
- 7/206 . . {using transform domain based approaches, e.g. Fourier}
- 7/2066 . . {using gradient-based methods}
- 7/2073 . . {Motion estimation over a hierarchy of resolutions}
- 7/208 . . {involving a stochastic approach, e.g. Kalman filter}
- 7/2086 . . {Computing motion from a sequence of stereo images}
- 7/2093 . . {Multi-camera tracking}
- 7/40 . . Analysis of texture {(depth or shape from texture [G06T 7/0059](#))}
- 7/401 . . {based on statistical texture description}
- 7/402 . . {using transform-domain based approaches}
- 7/403 . . {using image operators, e.g. filter, edge density, local histograms}
- 7/404 . . {using co-occurrence matrix computation}
- 7/405 . . {using random Fields}
- 7/406 . . {using fractals}
- 7/407 . . {based on structural texture description, i.e. primitives and placement rules}
- 7/408 . . {Color analysis}
- 7/60 . . Analysis of geometric attributes, e.g. area, center of gravity or perimeter, from an image
- 7/602 . . {Area, perimeter, diameter or volume}
- 7/604 . . {Convexity or concavity}
- 7/606 . . {Center of gravity or moments (moments specific for pattern recognition, e.g. Zernike moments [G06K 9/525](#))}
- 7/608 . . {Symmetry}
- 9/00 Image coding, e.g. from bit-mapped to non bit-mapped** ([H04N 1/00](#), [H04N 19/00](#) take precedence; ) compression in general [H03M](#); compression for image communication [H04N](#))
- 9/001 . . {Model-based coding, e.g. wire frame ([see provisionally also G06T 9/00](#))}
- 9/002 . . {using neural networks}
- 9/004 . . {Predictors, e.g. intraframe, interframe coding ([see provisionally also G06T 9/00](#))}
- 9/005 . . {Statistical coding, e.g. Huffman, run length coding ([see provisionally also G06T 9/00](#))}
- 9/007 . . {Transform coding, e.g. discrete cosine transform ([see provisionally also G06T 9/00](#))}
- 9/008 . . {Vector quantisation ([see provisionally also G06T 9/00](#))}
- 9/20 . . Contour coding, e.g. using detection of edges
- 9/40 . . Tree coding, e.g. quadtree, octree ([see provisionally also G06T 9/00](#))}
- 11/00 2D [Two Dimensional] image generation**
- 11/001 . . {Texturing; Colouring; Generation of texture or colour}
- 11/003 . . {Reconstruction from projections, e.g. tomography}
- 11/005 . . {Specific pre-processing for tomographic reconstruction, e.g. calibration, source positioning, rebinning, scatter correction, retrospective gating}
- 11/006 . . {Inverse problem, transformation from projection-space into object-space, e.g. transform methods, back-projection, algebraic methods}
- 11/008 . . {Specific post-processing after tomographic reconstruction, e.g. voxelisation, metal artifact correction}
- 11/20 . . Drawing from basic elements, e.g. lines or circles
- 11/203 . . {Drawing of straight lines or curves}

11/206	. . {Drawing of charts or graphs}	2200/24	. involving graphical user interfaces [GUIs]
11/40	. Filling a planar surface by adding surface attributes, e.g. colour or texture	2200/28	. involving image processing hardware
11/60	. Editing figures and text; Combining figures or text	2200/32	. involving image mosaicing
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	2200/36	. Review paper; Tutorial; Survey
<b>13/00</b>	<b>Animation</b>	<b>2201/00</b>	<b>General purpose image data processing</b>
13/20	. 3D [Three Dimensional] animation	2201/005	. Image watermarking
13/205	. . {driven by audio data}	2201/0051	. . Embedding of the watermark in the spatial domain
13/40	. . of characters, e.g. humans, animals or virtual beings	2201/0052	. . Embedding of the watermark in the frequency domain
13/60	. . of natural phenomena, e.g. rain, snow, water or plants	2201/0053	. . Embedding of the watermark in the coding stream, possibly without decoding; Embedding of the watermark in the compressed domain
13/80	. 2D [Two Dimensional] animation, e.g. using sprites	2201/0061	. . Embedding of the watermark in each block of the image, e.g. segmented watermarking
<b>15/00</b>	<b>3D [Three Dimensional] image rendering</b>	2201/0062	. . Embedding of the watermark in text images, e.g. watermarking text documents using letter skew, letter distance or row distance
15/005	. {General purpose rendering architectures}	2201/0063	. . in relation to collusion attacks, e.g. collusion attack resistant
15/02	. Non-photorealistic rendering	2201/0064	. . for copy protection or copy management, e.g. CGMS, copy only once, one-time copy
15/04	. Texture mapping	2201/0065	. . Extraction of an embedded watermark; Reliable detection
15/06	. Ray-tracing	2201/0081	. . whereby both original and watermarked images are required at decoder, e.g. destination-based, non-blind, non-oblivious
15/08	. Volume rendering	2201/0083	. . whereby only watermarked image required at decoder, e.g. source-based, blind, oblivious
15/10	. Geometric effects	2201/0201	. . whereby only tamper or origin are detected and no embedding takes place
15/20	. . Perspective computation	2201/0202	. . whereby the quality of watermarked images is measured; Measuring quality or performance of watermarking methods; Balancing between quality and robustness
15/205	. . . {Image-based rendering}	2201/0203	. . whereby the image with embedded watermark is reverted to the original condition before embedding, e.g. lossless, distortion-free or invertible watermarking
15/30	. . Clipping	2201/0601	. . whereby calibration information is embedded in the watermark, e.g. a grid, a scale, a list of transformations
15/40	. . Hidden part removal	<b>2207/00</b>	<b>Indexing scheme for image analysis or image enhancement</b>
15/405	. . . {using Z-buffer}	2207/10	. Image acquisition modality
15/50	. Lighting effects	2207/10004	. . Still image; Photographic image
15/503	. . {Blending, e.g. for anti-aliasing}	2207/10008	. . . from scanner, fax or copier
15/506	. . {Illumination models}	2207/10012	. . . Stereo images
15/55	. . Radiosity	2207/10016	. . Video; Image sequence
15/60	. . Shadow generation	2207/10021	. . . Stereoscopic video; Stereoscopic image sequence
15/80	. . Shading	2207/10024	. . Color image
15/83	. . . Phong shading	2207/10028	. . Range image; Depth image; 3D point clouds
15/87	. . . Gouraud shading	2207/10032	. . Satellite or aerial image; Remote sensing
<b>17/00</b>	<b>Three dimensional [3D] modelling, e.g. data description of 3D objects</b>	2207/10036	. . . Multispectral image; Hyperspectral image
17/005	. {Tree description, e.g. octree, quadtree}	2207/10041	. . . Panchromatic image
17/05	. Geographic models	2207/10044	. . . Radar image
17/10	. Constructive solid geometry [CSG] using solid primitives, e.g. cylinders, cubes	2207/10048	. . Infrared image
17/20	. Finite element generation, e.g. wire-frame surface description, {tessellation}	2207/10052	. . Images from lightfield camera
17/205	. . {Re-meshing}	2207/10056	. . Microscopic image
17/30	. Polynomial surface description	2207/10061	. . . from scanning electron microscope
<b>19/00</b>	<b>Manipulating 3D models or images for computer graphics</b>	2207/10064	. . Fluorescence image
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		
<b>2200/00</b>	<b>Indexing scheme for image data processing or generation, in general</b>		
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		

2207/10068	. . Endoscopic image	2207/20108	. . . Interactive selection of 2D slice in a 3D data set
2207/10072	. . Tomographic images	2207/20112	. . Image segmentation details
2207/10076	. . . 4D tomography; Time-sequential 3D tomography	2207/20116	. . . Active contour; Active surface; Snakes
2207/10081	. . . Computed x-ray tomography [CT]	2207/20121	. . . Active appearance model [AAM]
2207/10084	. . . Hybrid tomography; Concurrent acquisition with multiple different tomographic modalities	2207/20124	. . . Active shape model [ASM]
2207/10088	. . . Magnetic resonance imaging [MRI]	2207/20128	. . . Atlas-based segmentation
2207/10092	. . . . Diffusion tensor magnetic resonance imaging [DTI]	2207/20132	. . . Image cropping
2207/10096	. . . . Dynamic contrast-enhanced magnetic resonance imaging [DCE-MRI]	2207/20136	. . . Edge growing; Edge linking
2207/10101	. . . Optical tomography; Optical coherence tomography [OCT]	2207/20141	. . . Region-growing; Region merging; Connected component labeling
2207/10104	. . . Positron emission tomography [PET]	2207/20144	. . . Foreground-background segmentation
2207/10108	. . . Single photon emission computed tomography [SPECT]	2207/20148	. . . Thresholding
2207/10112	. . . Digital tomosynthesis [DTS]	2207/20152	. . . Watershed segmentation
2207/10116	. . X-ray image	2207/20156	. . . Automatic seed setting
2207/10121	. . . Fluoroscopy	2207/20161	. . . Level set
2207/10124	. . . Digitally reconstructed radiograph [DRR]	2207/20164	. . . Salient point detection; Corner detection
2207/10128	. . . Scintigraphy	2207/20168	. . . Radial search
2207/10132	. . Ultrasound image	2207/20172	. . Image enhancement details
2207/10136	. . . 3D ultrasound image	2207/20182	. . . Noise reduction or smoothing in the temporal domain; Spatio-temporal filtering
2207/10141	. . Special mode during image acquisition	2207/20192	. . . Edge enhancement; Edge preservation
2207/10144	. . . Varying exposure	2207/20201	. . . Motion blur correction
2207/10148	. . . Varying focus	2207/20204	. . . Removing film grain; Adding simulated film grain
2207/10152	. . . Varying illumination	2207/20208	. . . High dynamic range [HDR] image processing
2207/20	. Special algorithmic details	2207/20212	. . Image combination
2207/20004	. . Adaptive image processing	2207/20216	. . . Image averaging
2207/20008	. . . Globally adaptive	2207/20221	. . . Image fusion; Image merging
2207/20012	. . . Locally adaptive	2207/20224	. . . Image subtraction
2207/20016	. . Hierarchical, coarse-to-fine, multiscale or multiresolution image processing; Pyramid transform	2207/20228	. . Disparity calculation for image-based rendering
2207/20021	. . Dividing image into blocks, subimages or windows	2207/30	. Subject of image; Context of image processing
2207/20024	. . Filtering details	2207/30004	. . Biomedical image processing
2207/20028	. . . Bilateral filtering	2207/30008	. . . Bone
2207/20032	. . . Median filtering	2207/30012	. . . . Spine; Backbone
2207/20036	. . Morphological image processing	2207/30016	. . . Brain
2207/20041	. . . Distance transform	2207/30021	. . . Catheter; Guide wire
2207/20044	. . . Skeletonization; Medial axis transform	2207/30024	. . . Cell structures <u>in vitro</u> ; Tissue sections <u>in vitro</u>
2207/20048	. . Transform domain processing	2207/30028	. . . Colon; Small intestine
2207/20052	. . . Discrete cosine transform [DCT]	2207/30032	. . . . Colon polyp
2207/20056	. . . Discrete and fast Fourier transform, [DFT, FFT]	2207/30036	. . . Dental; Teeth
2207/20061	. . . Hough transform	2207/30041	. . . Eye; Retina; Ophthalmic
2207/20064	. . . Wavelet transform [DWT]	2207/30044	. . . Fetus; Embryo
2207/20068	. . Projection on vertical or horizontal image axis	2207/30048	. . . Heart; Cardiac
2207/20072	. . Graph-based image processing	2207/30052	. . . Implant; Prosthesis
2207/20076	. . Probabilistic image processing	2207/30056	. . . Liver; Hepatic
2207/20081	. . Training; Learning	2207/30061	. . . Lung
2207/20084	. . Artificial neural networks [ANN]	2207/30064	. . . . Lung nodule
2207/20088	. . Trinocular vision calculations; trifocal tensor	2207/30068	. . . Mammography; Breast
2207/20092	. . Interactive image processing based on input by user	2207/30072	. . . Microarray; Biochip, DNA array; Well plate
2207/20096	. . . Interactive definition of curve of interest	2207/30076	. . . Plethysmography
2207/20101	. . . Interactive definition of point of interest, landmark or seed	2207/30081	. . . Prostate
2207/20104	. . . Interactive definition of region of interest [ROI]	2207/30084	. . . Kidney; Renal
		2207/30088	. . . Skin; Dermal
		2207/30092	. . . Stomach; Gastric
		2207/30096	. . . Tumor; Lesion
		2207/30101	. . . Blood vessel; Artery; Vein; Vascular
		2207/30104	. . . . Vascular flow; Blood flow; Perfusion
		2207/30108	. . Industrial image inspection
		2207/30112	. . . Baggage; Luggage; Suitcase
		2207/30116	. . . Casting
		2207/30121	. . . CRT, LCD or plasma display



2207/30124 . . . Fabrics; Textile; Paper  
 2207/30128 . . . Food products  
 2207/30132 . . . Masonry; Concrete  
 2207/30136 . . . Metal  
 2207/30141 . . . Printed circuit board [PCB]  
 2207/30144 . . . Printing quality  
 2207/30148 . . . Semiconductor; IC; Wafer  
 2207/30152 . . . Solder  
 2207/30156 . . . Vehicle coating  
 2207/30161 . . . Wood; Lumber  
 2207/30164 . . . Workpiece; Machine component  
 2207/30168 . . Image quality inspection  
 2207/30172 . . Centreline of tubular or elongated structure  
 2207/30176 . . Document  
 2207/30181 . . Earth observation  
 2207/30184 . . . Infrastructure  
 2207/30188 . . . Vegetation; Agriculture  
 2207/30192 . . . Weather; Meteorology  
 2207/30196 . . Human being; Person  
 2207/30201 . . . Face  
 2207/30204 . . Marker  
 2207/30208 . . . Marker matrix  
 2207/30212 . . Military  
 2207/30216 . . Redeye defect  
 2207/30221 . . Sports video; Sports image  
 2207/30224 . . . Ball; Puck  
 2207/30228 . . . Playing field  
 2207/30232 . . Surveillance  
 2207/30236 . . Traffic on road, railway or crossing  
 2207/30241 . . Trajectory  
 2207/30242 . . Counting objects in image  
 2207/30244 . . Camera pose  
 2207/30248 . . Vehicle exterior or interior  
 2207/30252 . . . Vehicle exterior; Vicinity of vehicle  
 2207/30256 . . . . Lane; Road marking  
 2207/30261 . . . . Obstacle  
 2207/30264 . . . . Parking  
 2207/30268 . . . Vehicle interior

#### **2210/00 Indexing scheme for image generation or computer graphics**

2210/04 . . Architectural design, interior design  
 2210/08 . . Bandwidth reduction  
 2210/12 . . Bounding box  
 2210/16 . . Cloth  
 2210/21 . . Collision detection, intersection  
 2210/22 . . Cropping  
 2210/24 . . Fluid dynamics  
 2210/28 . . Force feedback  
 2210/32 . . Image data format  
 2210/36 . . Level of detail  
 2210/41 . . Medical  
 2210/44 . . Morphing  
 2210/52 . . Parallel processing  
 2210/56 . . Particle system, point based geometry or rendering  
 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