CLASSIFICATION ORDER 1836

OCTOBER 5, 2004

Project No. E-6687

	Class	Subclass	Art Unit	Ex'r Search Room No.
Abolished:	345	700-867 Cross-Reference Art Collections: 961-970, 970.1, 971-978	2173 2174 2173, 2174	ELEC 00-00
Established:	715	700-867	2174	ELEC 00-00
Established.	/13	Cross-Reference Art Collections:	2174 2173	ELEC 00-00
Title Change	345	961-970, 970.1, 971-978 Class title	2174	
Title Change:	715 715	Class title Class title Title of subclass 500		
Position Change:	715	500		

The following classes are impacted by this project:

Class (es): 40, 178, 200, 235, 248, 250, 252, 257, 273, 307, 315, 324, 340, 341, 342, 343, 348, 349, 355, 356, 358, 359, 360, 361, 363, 368, 369, 370, 377, 378, 379, 382, 388, 386, 396, 400, 428, 434, 438, 455, 463, 473, 482, 700, 434, 700, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 725, 902, and D14

This order includes the following:

- A. CLASSIFICATION MANUAL CHANGES
- B. LISTING OF PRINCIPAL SOURCE OF ESTABLISHED AND DISPOSITION OF ABOLISHED PAGES
- C. CHANGES TO THE U.S. I.P.C. CONCORDANCE
- D. DEFINITION CHANGES

CLASSIFICATION ORDER 1836

OCTOBER 5, 2004

Project No. E-6687

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			OCTOBER 2004
418	COMPUTER GRAPHICS PROCESSING	624	Object clipped to another object
419	.Three-dimension	625	Based on image data
420	Solid modelling	626	Masking
421	Hidden line/surface determining	627	Non-rectangular array
422	Z buffer (depth buffer)	628	Rectangular region
423	Tessellation	629	Merge or overlay
424	Voxel	630	Combining model representations
426	Lighting/shading	631	Reducing redundancy
427	Space transformation	632	Placing generated data in real scene
428	.Adjusting level of detail	633	Augmented reality (real-time)
581	.Attributes (surface detail or	634	Image based
	characteristic, display attributes)	635	Non-overlapping
582	Texture	636	Character and graphics
583	Solid Texture	637	Priority based
584	Bump map	638	Insertion of bitmapped moving
585	Non-planar surface		picture
586	Mathematically defined	639	Weighted
587	MIP map	640	Weights vary across image (e.g.,
588	Repeating pattern		transition from foreground to
589	Color or intensity	641	background)Fixed overlay pattern
590	Gamut clipping or adjustment	642	rixed overlay pattern
591	Color processing in perceptual color	643	Arithmetic processing of image data
E00	space	644	Matrix calculations
592	Transparency (mixing color values)Color selection	645	Hierarchy of transformations (e.g.,
593 594	Using GUI	043	hierarchy of global and local
594 595	_		coordinate)
596	Expert system or AIDither or halftone	646	Morphing
597	Color	647	Distortion
598	Spatial	648	Affine
599	Spatial	649	Rotation
600	Color bit data modification or	650	Graphical user interface tools
000	conversion	651	Alignment functions (e.g., snapping,
601	Using look up table		gravity)
602	Plural look up tables	652	Constrained manipulations (e.g.,
603	Format change (e.g., NTSC to RGB,		movement in less than all dimensions)
	RGB to composite, XYZ to RGB)	653	3D manipulations
604	Color space transformation (e.g.,	654	2D manipulations
	RGB to YUV)	655	Object based
605	Change in number of bits for a	656	Image based (addressing)
	designated color (e.g., 4 bits to 8 bits, 8 bits to 4 bits)	657	By arbitrary angle
606	Interpolation of attribute values	658	By 90 degrees increment
000	across object surface	659	Image rotates in response to display
607	In perspective	033	device orientation
608	Tri-linear	660	Scaling
609	Bi-linear	661	Graphical user interface tools
610	Linear	662	Alignment functions (e.g., snapping,
611	Anti-aliasing or image smoothing		gravity)
612	Save attributes for each object	663	Constrained manipulations (i.e.,
	affecting a given pixel		movement in less than all
613	Subpixel processing		dimensions)
614	Pixel fragment	664	3D manipulations
615	Convolving technique	665	2D manipulations
616	Error diffusion	666	Object based
617	Contrast	667	Image based (addressing)
618	Image with abnormal condition	668	By arbitrary ratio
619	.Graphic manipulation (object processing	669	By integer multiples
	or display attributes)	670	Reduction only
620	Clipping	671	Enlargement only
621	Based on model of objects		
622	Testing or using bounding shape		
	(e.g., bounding box sphere)		
623	Object clipped to view volume		
	# Witle Change		A Indont Change

[#] Title Change
* Newly Established Subclass

[@] Indent Change & Position Change

			OCTOBER 2004
	COMPUTER GRAPHICS PROCESSING	169	Portable (i.e., handheld, calculator,
	.Graphic manipulation (object processing		remote controller)
	or display attributes)	170	Light source associated with each key
672	Translation	171	Having foreign language capability
673	Averaging technique	4 770	(e.g., Japanese, Chinese)
674	Copying data to create additional rows or columns	172	Having programmable function key
676	Graphical user interface tools	173 174	.Touch panelIncluding impedance detection
677	Alignment functions (e.g., snapping,	175	Including impedance detectionIncluding optical detection
077	gravity)	176	Transparent substrate having light
678	Constrained manipulations (i.e.,	170	entrapment capability (i.e.,
	movement in less than all		waveguides)
	dimensions)	177	Including surface acoustic detection
679	3D manipulations	178	. With alignment or calibration
680	2D manipulations	4.00	capability (i.e., parallax problem)
681 682	Object based	179	.Stylus
683	Image based (addressing)Sprite	180 181	Light pen for CRT display
684	Scrolling	182	.CRT having tracking capability .Light pen for fluid matrix display
685	Alphanumeric	102	panel
686	Memory addressing	183	Light pen for controlling plural
687	Smooth or continuous		light-emitting display elements
688	Attribute changes during scrolling		(e.g., LED, lamps)
689	Textual entry or display of	184	.Mechanical control (e.g., rotatable
	manipulation information (e.g.,	E01	knob, slider)
	enter or display degree of	501 502	COMPUTER GRAPHIC PROCESSING SYSTEM .Plural graphics processors
440	rotation)	502	Coprocessor (e.g., graphic
440.1	.Graph generatingReal-time waveform display	303	accelerator)
440.2	Rear-cime waveform display	504	Master-slave processors
441	Shape generating	505	Parallel processors (e.g., identical
442	Curve		processors)
443	Straight line	506	Pipeline processors
467	.Character generating	519	.Integrated circuit (e.g., single chip
468	Character geometry processing	520	semiconductor device)
469	Character generation using control	520	.Interface (e.g., controller) .Graphic command processing
	points or hints	530	COMPUTER GRAPHICS DISPLAY MEMORY SYSTEM
469.1	Character border	531	.Graphic display memory controller
470	Generating character fill data from outline data	532	Plural memory controllers
4 71	Alteration of stored font	533	Using different access modes
472	Scaling	534	Memory access timing signals
472.1	Reduction only	535	Memory arbitration
472.2	Enlargement only	536	.Plural storage devices
472.3	Calligraphic	537	Data transfer between memories
473	.Animation	538	Data transfer between system memory
474	Motion planning or control	F20	display memory
475	Temporal interpolation or processing	539	Double buffered
156	DISPLAY PERIPHERAL INTERFACE INPUT	540	Interleaved
	DEVICE	541 542	.Shared memoryUnified memory architecture (e.g.,
157	Cursor mark position control device	344	UMA)
158	Including orientation sensors (e.g., infrared, ultrasonic, remotely	543	.Memory allocation
	controlled)	544	.Memory partitioning
159	Having variable cursor speed	545	.Frame buffer
160	Cursor key	546	.Multi-format frame buffer
161	Joystick	547	Memory for storing video data
162	Positional storage means	548	Off-screen memory
163	Mouse	549	Color memory
164	Rotatable ball detector	550	Multiple planes
165	Photosensor encoder	551	Character memory
166	Optical detector		
167	Trackball		
168	.Including keyboard		

[#] Title Change * Newly Established Subclass

[@] Indent Change & Position Change

552	COMPUTER GRAPHICS DISPLAY MEMORY SYSTEM .Texture memory	1.3	.Tiling or modular adjacent displays .Remotely located
553	.Display list memory	2.2	Presentation of similar images
554	.Multi-port memory	2.3	Wireless connection
555	.For storing compressed data	3.1	.Diverse systems (e.g., CRT or LCD
556	For storing condition code, flag or status	3.2	interface)
557	.Cache	3.3	Frame, field or scan rate conversion
558	.First in first out (i.e., FIFO)	3.3	Number of pixels per row or column conversion (i.e., resolution conversion)
559 560	Register Row buffer (e.g., line memory)	3.4	Controller automatically senses
561	.Logical operations	4	monitor resolution SINGLE DISPLAY SYSTEM HAVING STACKED
562	Bit block transfer	4	SUPERIMPOSED DISPLAY DEVICES (E.G.,
563	Mask data operation		TANDEM)
564	.Addressing	5	.Diverse display devices
565	. Using memory for storing address	6	.Three-dimensional arrays
566	informationAddress manipulation	7	IMAGE SUPERPOSITION BY OPTICAL MEANS (E.G., HEADS-UP DISPLAY)
567	Using decoding	8	Operator body-mounted heads-up display
568	Address translation (e.g., between virtual and physical addresses)	9	(e.g., helmet mounted display)
569	For 2D coordinate to linear address	10	.Plural image superposition DATA RESPONSIVE CRT DISPLAY CONTROL
	conversion	11	.CRT provides display control
570	Page mode	12	.Data responsive deflection and
571	Memory addresses arranged in matrix row and column addresses)		intensity control
572	Address generator	13	.Data responsive deflection control
573	Plural address generators	14 15	X and Y axis deflection control
574	Read/Write address generator	15	<pre>Curvilinear deflection control (e.g., lissajous)</pre>
204	DISPLAY DRIVING CONTROL CIRCUITRY	16	Stroke or vector
205	.Physically integral with display	17	Stroke of vectorStrokes for forming characters
	elements	18	Up/down counter
206	Having common base or substrate	19	Impedance Array
207	Light detection means (e.g., with	20	.Data responsive intensity control
500	photodetector)	21	Magnetic element array
690	<pre>.Intensity or color driving control (e.g., gray scale)</pre>	22	.Color display
691	Temporal processing (e.g., pulse width	23	.Graphic and alphanumeric display
	variation over time	24	.Graphic display
692	Binary weighted	25	.Alphanumeric display
693	Non-binary weighted	26	Character generator
694	Spatial processing (e.g., patterns or	27	.Combined with storage means
	subpixel configuration)	28	Addressing
695	Subpixels have different shapes	29	.Delay line
696	Changing of subpixel location over time	30	PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM (E.G., NON-CRT)
697	Including optical means	31	.Physically movable array
698	<pre>.Adjusting display pixel size or pixels per given area (i.e., resolution)</pre>	32	<pre>.Optical means interposed in viewing path (e.g., filters, lens, etc.)</pre>
699	Controller automatically senses	33	.Segmented display elements
	monitor resolution	34	Seven segment display
208	.Waveform generator coupled to display elements	35 36	Bar graphElectroluminescent display elements
209	Field period polarity reversal	37	Gas discharge display segments (e.g.,
210	Having three or more voltage levels		plasma)
211	.Display power source	38	Liquid crystal display segments
212	Regulating means	39	Light-emitting diode segments (LEDS)
213	Synchronizing means	40	Plural (e.g., stacked, adjacent)
214	.Controlling the condition of display elements		- · · · · · · · · · · · · · · · · · · ·
215	Including priming means		•
1.1	PLURAL DISPLAY SYSTEMS		•
1.2	.Data transmitted or received at surface of display		

[#] Title Change
* Newly Established Subclass

[@] Indent Change & Position Change

			OCIOBER 2004
	PLURAL PHYSICAL DISPLAY ELEMENT CONTROL	86	Magneto-optic
	SYSTEM (E.G., NON-CRT)	87	Liquid crystal display elements (LCD)
	.Segmented display elements	88	Color
41	Fluid light-emitting display elements	89	Gray scale capability (e.g.,
	(e.g., gas, plasma)	03	halftone)
42	Controlling circuitry	90	Control means at each display
43	Mask or electrode shape	30	element
44	Solid light-emitting display elements	91	Diode or varistor
45	Electroluminescent	92	Thin film tansistor (TFT)
46	Light-emitting diodes	93	Redundancy (e.g., plural control
47	Fluorescent elements	<i>J J</i>	elements or electrodes)
		94	Waveform generation
48	Light-controlling display elements	95	Three or more voltages
49	Electrochromic elements	96	_
50	Liquid crystal elements		Field period polarity reversal
51	Display element selection circuitry	97	Ferroelectric liquid crystal elements
52	Power supply generating circuitry	0.0	
53	Specific waveform (e.g., square	98	Specific display element control means (e.g., latches, memories,
	waveforms, sinusoidal)		logic)
54	Field period polarity reversal	99	Particular timing circuit
55	.Display elements arranged in matrix	100	Particular row or column control
	(e.g., rows and columns)	100	(e.g., shift register)
56	Image shifting means (i.e., traveling	101	- · · · · · · · · · · · · · · · · · · ·
	message)	101	Data signal compensation in response to temperature
57	Having endless belt or tape reader	102	Backlight control
58	Crosstalk elimination	102	-
59	Matrix for conveying alphanumeric data	103	Grouped electrodes (e.g., matrix partitioned into sections)
60	Fluid light emitter (e.g., gas,	104	-
	liquid, or plasma)	104	Input/output liquid crystal display panel
61	Shifting means	105	_
62	Specified plasma coupling path	105	Electrochromic elements
63	Intensity control	106	Thermochromic elements
64	Liquid light emitter	107	Particle suspensions (e.g.,
65	Phosphor excited by fluid response	100	electrophoretic)
66	Particular discharge path	108	Plural mechanically movable display
67	More than two electrodes per element	100	elements
68	Means for combining selective and	109	Having shutters
00	sustain signals	110	With motor or rotor driver means
69	Resistor-diode arrangement	111	With a permanent magnet placed on
70	Including transformer		movable display elements
70 71	-		
	Electrode insulated from fluid medium		CROSS-REFERENCE ART COLLECTIONS
72 73	Color		********
73	Incandescent	901	ELECTRONIC BOOK WITH DISPLAY
74.1	Cathodolulminescent type	902	MENU DISPLAY
75.1	Vacuum fluorescent	903	MODULAR DISPLAY
75.2	Field emissive (e.g., FED, Spindt,	904	DISPLAY WITH FAIL/SAFE TESTING FEATURE
	microtip, etc.)	905	DISPLAY DEVICE WITH HOUSING STRUCTURE
76	Electroluminescent	947	FONT CHARACTER EDGE PROCESSING
77	Brightness or intensity control	948	ALTERATION OF STORED FONTS TO MAINTAIN
78	Having compensating pulse		FEATURE CONSISTENCY THROUGHOUT SCALED
79	Field period polarity reversal		FONT
80	Driving means integral to substrate	949	ANIMATION PROCESSING METHOD
81	Optical addressing (e.g.,	950	.Sprite processing
	photodetection)	951	Key frame processing
82	Solid body light emitter (e.g., LED)	952	.Simulation
83	Color	953	.Geometric processing
84	Light-controlling display elements	954	Ouaternions
85	Electroscopic (e.g., movable		~
0.5	electrodes or electrostatic	955	Morphing
	elements)	956	.Language driven animation
		957	Actor
		958	.Collision avoidance
		959	.Object path adherence
		960	.Iterative display of preconfigured
			images

[#] Title Change
* Newly Established Subclass

[@] Indent Change & Position Change

			OCTOBER 2001
	*********	FOR 135	DISPLAY ATTRIBUTE CONTROLLER (345/112)
	FOREIGN ART COLLECTIONS	FOR 136	.Particular overlay (e.g., superimposing
	*********	405	feature) (345/113)
FOR 000	CLASS-RELATED FOREIGN DOCUMENTS	FOR 137	Foreground and background (345/114)
	ign patents or non-patent liter- om subclasses that have been re-	FOR 138	.Simultaneous diverse images (345/115)Character and graphical display
classifi	ed have been transferred direct- FOR Collections listed below.	FOR 140	(345/116) .Specified image of abnormal condition
These Co	ollections contain ONLY foreign or non-patent literature. The	FOR 141	(345/117) .Having image confined to designated
parenthe	tical references in the Collec- les refer to the abolished sub-		region (e.g., image clipping) (345/118)
classes were der	from which these Collections ived.	FOR 142	<pre>.Image movement or position control (e.g., panning) (345/121)</pre>
	PLURAL PHYSICAL DISPLAY ELEMENT CONTROL	FOR 143	Scrolling (345/123)
	SYSTEM (E.G., NON-CRT) (345/30)	FOR 144	Alphanumeric (345/124)
	.Display elements arranged in matrix	FOR 145	Graphical (345/125)
100	(e.g., rows and columns) (345/55)	FOR 146	Rotation (345/126)
FOR 100	Cathodolulminescent type (345/74)	FOR 147	.Image size control (345/127)
FOR 101	Vacuum fluorescent (345/75)	FOR 148	Alphanumeric (345/128)
FOR 102	Memory (345/521)	FOR 149	Reduction (345/129)
FOR 103	.Data manipulation (e.g., masking,	FOR 150	Enlargement (345/130)
	interpolation) (345/523)	FOR 151	Graphical (345/131)
FOR 104 FOR 105	Logical operation (345/524) Bit block transfer (345/525)	FOR 152	.Defined resolution (e.g., EGA, VGA) (345/132)
FOR 106	.Data transfer between graphic system	FOR 153	.Graphic display (345/133)
FOR 107	components (345/526) DISPLAY STORAGE DEVICE (345/507)	FOR 154	Waveform display (e.g., oscilloscope type) (345/134)
FOR 108	.Color memory (345/186)	FOR 155	Vector display (345/135)
FOR 109 FOR 110	Multiple planes (345/510)	FOR 156	With image smoothing control (e.g., anti-aliasing) (345/136)
FOR 111	Addressing with priority (345/188)	FOR 157	Convolving technique (345/137)
	.Bit map or graphic memory (345/509)	FOR 158	Averaging technique (345/138)
FOR 112	Addressing (345/515)	FOR 159	Perspective (345/139)
FOR 113	Mask data operation (345/191)	FOR 159	Bar graph (345/140)
FOR 114	.Character memory (345/192)	FOR 161	
FOR 115	Addressing (345/193)	FOR 161	.Character display (345/141)Calligraphic (345/142)
FOR 116	Character generator (345/194)	FOR 102	
FOR 117	Multiple fonts (345/195)		COMPUTER GRAPHICS PROCESSING (345/418) Character generating (345/467)
FOR 118	Row buffer (e.g., line memory) (345/196)	FOR 163	Character border (345/144)
FOR 119	.Register (345/513)	FOR 164	CURSOR MANIPULATION (345/145)
FOR 120	Shift register (345/197)	FOR 165	.Menu selection (345/146)
FOR 121	With routing logic (345/198)		DISPLAY ATTRIBUTE CONTROLLER (345/112)
FOR 122	.Color look-up-table (e.g., palette) (345/199)	FOR 166	.Intensity control (e.g., gray scale) (345/147)
FOR 123 FOR 124	.Addressing circuuuitry (345/516)Memory addresses arranged in matrix	FOR 167	Temporal processing (e.g., pulse width variation over time) (345/148)
FOR 124	(e.g., row and column addresses) (345/517)	FOR 168	Spatial processing (e.g., patterns or subpixel configurations) (345/149)
FOR 125	.Plural storage devices (345/508)	FOR 169	Selectable color attributes (345/150)
FOR 126	Data transfer between memories	FOR 170	Including optical means (345/151)
	(345/511)	FOR 171	Designated subpixel arrangement
FOR 127	.Shared memory (345/512)		(345/152)
FOR 128	.Condition code, flag, or status (345/514)	FOR 172	Color bit data modification or conversion (345/153)
FOR 129	.Multiple port access (345/518)	FOR 173	Format change (e.g., NTSC to RGB, RGB
FOR 130	.Data compression or compaction (345/202)		to composite, or XYZ to RGB) (345/154)
FOR 131	.Significant data assignment in storage device (345/203)	FOR 174	Change in number of bits for a designated color (e.g., 4 bits to
FOR 132	PLURAL DISPLAY SYSTEMS (345/1)		8 bits, 8 bits to 4 bits)
FOR 133	Remotely located (345/2)		(345/155)
FOR 134	.Diverse systems (e.g., CRT/LCD		COMPUTER GRAPHICS PROCESSING (345/418)
	interface) (345/3)		

[#] Title Change
* Newly Established Subclass

[@] Indent Change & Position Change

(345/302)	
COMPUTER GRAPHICS PROCESSING (345/418)	
.Three-dimension (345/419)	
FOR 209Mapping image onto surface of 3D object (345/425)	
FOR 210 .Surface detail/characteristic (345/42	9)
FOR 211 Texture (345/430)	
FOR 212 Color (345/431)	
FOR 213Intensity (345/432)	
FOR 214 .Object processing (345/433)	
FOR 215Clipping (345/434)	
FOR 216Merge/overlay (345/435)	
FOR 217 Affine (345/436)	
FOR 218Rotation (345/437)	
FOR 219Translation (345/438)	
FOR 220 Sealing (345/439)	

[#] Title Change
* Newly Established Subclass

CLASS 715 DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT, OPERATOR INTERFACE PROCESSING, AND SCREEN SAVER DISPLAY PROCESSING

# 500	PRESENTATION PROCESSING OF DOCUMENT	* 711	Tool tip (e.g., cursor position
# 500.1	.Synchronization of diverse media		based)
# 501.1	.Hypermedia	* 712	Topic roadmap or index
# 502	.Drawing	* 713	Hierarchical
# 503 # 504	.SpreadsheetCell format control	* 714	Combining diverse help information (e.g., different sources)
# 505	.Form	* 715	Balloon or bubble appearance
# 505 # 506	Form creation	* 716	.On screen video or audio system
# 507	Form filling		interface
# 508	Fitting data into field on form	* 717	Multiple diverse systems
# 509	.Table	* 718	Mode switching interface (e.g., switching between TV and computer)
# 510	Ruled lines	* 719	Video interface
# 511	.Version management	* 720	Video interface Video traversal control
# 512	.Annotation control	* 721	
# 513	.Structured document (e.g., HTML, SGML,	* 721 * 722	Indexed control
	ODA, CDA)	* 722 * 723	Video parameter control
# 514	.Hierarchical control	^ /23	For video segment editing or sequencing
# 515 " 516	. Compound document	* 724	Cut and paste operation
# 516	Matching application process to	* 725	Trimming
# 517	displayed data type	* 726	Effects or transitions interface
# 517 # 518	.Layout	* 727	.Audio user interface
# 518 # 519	Spacing control	* 728	Audio input for on-screen manipulation
	Horizontal spacing		(e.g., voice controlled GUI)
# 520	Area designation	* 729	For a visually challenged user
# 521	. Boundary processing	* 730	.Presentation to audience interface
# 522	Format information in separate file		(e.g., slide show)
# 523	Format transformation	* 731	Authoring tool
# 524	Detecting format code change	* 732	Slide manipulating or editing
# 525	Pagination	* 733	.For plural users or sites (e.g.,
# 526	.Display processing		network)
# 527	Print preview	* 734	Interactive network representation of
# 528	Color attribute		devices (e.g., topology of
# 529	Text attribute		workstations)
# 530	.Edit, composition, or storage control	* 735	Configuration
# 531	Text	* 736	Network managing or monitoring status
# 532	Dictionary	* 737	User navigation between devices
# 533	Spell Check	* 738	Network resource browsing or navigating
# 534	Input of abbreviated word form	* 739	Selecting from a resource list (e.g.,
# 535	Ideographic generator	133	address book)
# 536	Multilingual	* 740	Remote operation of computing device
# 537	Footnoting	* 741	Access control or permission
# 538	Equation or formula processing	* 742	Interactive portal (e.g., secure
# 539	Block control	, 42	point of access)
# 540	Replacement of element	* 743	Access rights to interactive controls
# 541	. Handwritten textual input	* 744	Interface customization or adaption
# 542	.Font selection		(e.g., client server)
* 700	OPERATOR INTERFACE (E.G., GRAPHICAL USER INTERFACE)	* 745	Based on stored usage or user profile (e.g., frequency of use, cookies)
* 701	.Force feedback interaction	* 746	Interface conversion
* 702	.Tactile based interaction	* 747	End user based (e.g., preference
* 703	<pre>.Cultural based (including language, time, monetary units displayed)</pre>		setting)
* 704	.Playback of recorded user events (e.g., script or macro playback)	* 748	.User interactive multicomputer data transfer (e.g., file transfer)
* 705	Help presentation	* 749	<pre>Downloading remote executables (e.g., Java, CGI)</pre>
* 706	Virtual character or avatar (e.g.,	* 750	.Multiple users on a single workstation
+ 707	animated person)	* 751	.Computer supported collaborative work
* 707	Adaptive to user skill level		between plural users
* 708 * 700	Context sensitive	* 752	Interactive email
* 709	Coaching (e.g., animated examples, or handholding or show me execution)	* 753	Computer conferencing
* 710	Input alert		

[#] Title Change
* Newly Established Subclass

[@] Indent Change & Position Change

DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT, OPERATOR INTERFACE PROCESSING, AND SCREEN SAVER DISPLAY PROCESSING CLASS 715

			00102211 2001
	OPERATOR INTERFACE (E.G., GRAPHICAL USER	* 796	Bring to top
	INTERFACE) .Computer supported collaborative work	* 797	Viewing lower priority windows (e.g., overlapped windows)
	between plural usersComputer conferencing	* 798	Combining moving and resizing
* 754	Multicursor (e.g., multiple on-screen		operation (e.g., moving causes resizing)
	pointers)	* 799	Moving (e.g., translating)
* 755	Floor control	* 800	Resizing (e.g., scaling)
* 756	Real Time Video	* 801	Contained object scale change
* 757	Virtual 3D environment	* 802	Focus control
* 758	Chat room	* 803	Window differentiation
* 759	Group window	* 804	Interwindow link or communication
* 760	.Mark up language interface (e.g., HTML)	* 805	On-screen link or communication
* 761	.Plural adjacent interactive display devices	* 806	(e.g., cue)Window memory structure
* 762	.User interface development (e.g., GUI	* 807	Stored priority attribute
	builder)	* 808	Pop-up control
* 763	Graphical or iconic based (e.g.,	* 809	Dialog box
	visual program)	* 810	Menu or selectable iconic array (e.g.,
* 764	.On-screen workspace or object		palette)
* 765	Customizing multiple diverse workspace objects	* 811	Based on usage or user profile (e.g., frequency of use)
* 766	Z order of multiple diverse workspace objects	* 812	Preselection (e.g., best guess before mouse click)
* 767	Focus control of multiple diverse	* 813	Default selection item
	workspace objects	* 814	Limited time selection opportunity
* 768	Translucency or transparency interface	* 815	Sizing modification (e.g., scaling)
	element (e.g., invisible control)	* 816	Partial input lookup (e.g., partial
* 769	Data transfer operation between objects (e.g., drag and drop)	. 015	string lookup)
* 770	Cut and paste	* 817	Context location indication (e.g.,
* 771	Instrumentation and component modeling		previous or next menu item indication)
	<pre>(e.g., interactive control panel, virtual device)</pre>	* 818	Simultaneous next and previous
* 772	Progress or activity indicator	* 819	<pre>indication (e.g., menu road map)Next menu indication</pre>
* 773	Virtual input device (e.g., virtual	* 820	Previous menu indication
	keyboard)	* 821	Emphasis
* 774	Ticker metaphor	* 822	Preselection emphasis
* 775	<pre>Office layout metaphor (e.g., filing cabinet, desk)</pre>	* 823	Selection or confirmation emphasis
* 776	·	* 824	Unavailable emphasis
* 777	Indexed book or notebook metaphor	* 825	Dynamically generated menu items
* 778	Tab metaphor (e.g., property sheet)Multiple virtual screen or desktop	* 826	Add on item (e.g., software developed, customized)
+ 770	switching	* 827	Mnemonic (e.g., accelerator key)
* 779 * 700	Task bar or desktop control panel	* 828	Partial menu display (e.g., one menu
* 780 * 781	Entry field (e.g., text entry field)Window or viewpoint	* 829	item at a time)Advancing to next menu item in the
* 782	3D Perspective view of window layout	° 629	same menu
* 783	On-screen window list or index	* 830	Scrolling (e.g., spin dial)
* 784	Window scrolling	* 831	With specific input device
* 785	Autoscrol1	* 832	Analog selection style
* 786	Scroll tool (e.g., scroll bar)	* 833	Slider control
* 787	With content attributes on scroll tool	* 834	Radial based (e.g., radial or pie menu)
* 788	Layout modification (e.g., move or resize)	* 835	Selectable iconic array
* 789	Based on usage or user profile	* 836	3D icons
	(e.g., frequency of use)	* 837 * 838	Compound or aggregate iconThumbnail or scaled image
* 790	Overlap control	* 839	Imitating real life object
* 791	Always on top	037	Imitacing rear fire object
* 792	Tiling or split pane		
* 793	Cascading		
* 794	Priority or overlap change (e.g., z-order)		
* 795	Minimizing or send to bottom		

[#] Title Change
* Newly Established Subclass

[@] Indent Change & Position Change

	OPERATOR INTERFACE (E.G., GRAPHICAL USER INTERFACE)	* 966	Computer process (e.g., operation of computer)
	.On-screen workspace or object	* 967	Visual or iconic programming
	<pre>Menu or selectable iconic array (e.g., palette)</pre>	* 968	Interface for database querying and retrieval
* 840	Using button array	* 969	Network layout and operation interface
* 841	Sub-menu structure	* 970	Instrumentation and component
* 842	Tear off		modelling (e.g., interactive
* 843	Pull down		control panel)
* 844	Timed	* 970.1	.Amusement or marital aid interface
* 845	Multiple selections in a single menu	* 971	COOPERATIVE DECISION SUPPORT SYSTEMS FOR GROUP OF USERS
* 846	Non-array icons	* 972	INSERTED REAL-TIME VIDEO IN OPERATOR
* 847	Shortcut	3,2	INTERFACE
* 848	Interface represented by 3D space	* 973	SCROLL TOOL (E.G., WINDOW SCROLL BAR)
* 849	Individual object	* 974	SLIDER CONTROL AS ON-SCREEN OBJECT IN
* 850	Navigation within 3D space		OPERATOR INTERFACE
* 851	On-screen navigation control	* 975	POP-UP DIALOG BOX FOR ENTRY
* 852	Picking 3D objects	* 976	3-D ICON
* 853	Hierarchy or network structure	* 977	DYNAMIC ICON (E.G., ANIMATED OR LIVE
* 854	Navigation within structure		ACTION)
* 855	On-screen roadmap or index	* 978	AUDIO INTERACTION AS PART OF AN OPERATOR
* 856	Cursor		INTERFACE
* 857	Pointer direction adjustment		*********
* 858	Automatic position adjustment		FOREIGN ART COLLECTION
* 859	Status indicator		********
* 860	Selection emphasis	FOR000	CLASS-RELATED FOREIGN DOCUMENTS
* 861	Dynamically changed appearance	* FOR 176	OPERATOR INTERFACE (345/326)
* 862	<pre>(e.g., animated or live action)Proximity detection</pre>	* FOR 177	.Interaction in a television environment (345/327)
* 863	.Gesture-based	* FOR 178	For video segment editing or
* 864	.For a small display screen (e.g.,	1001 210	sequencing (345/328)
	personal digital assistant,	* FOR 179	.For plural users or sites (345/329)
	palm-top)	* FOR 180	Computer conferencing (345/330)
* 865	.Miscellaneous interface for the handicapped or disable user	* FOR 181	Computer supported cooperative work (345/331)
* 866	.Miscellaneous customization or	* FOR 182	Group window (345/332)
	adaptation	* FOR 183	.Interface customization or edition
* 867	SCREEN SAVER DISPLAY		(345/333)
	********	* FOR 184	Graphical appearance (345/334)
	CROSS-REFERENCE ART COLLECTIONS	* FOR 185	Link between object and task or
	********		function (e.g., client/server)
900	DOCUMENT STRUCTURAL ELEMENT		(345/335)
901	.Active document	* FOR 186	.Having on-line help (345/336)
902	.Multilayer document	* FOR 187	Adaptive to user skill level (345/337)
903	.3-D spreadsheet	* FOR 188	Context sensitive (345/338)
904	.Details of spreadsheet data records	* FOR 189	.On-screen workspace or object (345/339)
905	.Spreadsheet cell protection	* FOR 190	Window (345/340)
906	.Creating one form from another	* FOR 191	Window scrolled to needed portion
907	.Hierarchical document control with varying levels of detail	* FOR 192	(345/341)Layout modification (e.g., move or
908	.Document format layout template		resize) (345/342)
909	.Document page collating	* FOR 193	Window differentiation (345/343)
910		* FOR 194	Priority (345/344)
	.Document presenting plural pages on a single sheet	* FOR 195	Viewing lower priority window
911	.Document page description processing	* EOD 106	(345/345)
* 961	OPERATOR INTERFACE WITH VISUAL STRUCTURE OR FUNCTION DICTATED BY INTENDED USE	* FOR 196	Interwindow link or communication (345/346)
* 962	Operator interface for marketing or sales	* FOR 197	<pre>Pop-up control (e.g., message or dialog box) (345/347)</pre>
<u>*</u> 963	.Calendar or scheduling	* FOR 198	Icon (345/348)
* 964	.CAD or CAM (e.g., interactive design	* FOR 199	Metaphoric icon object (345/349)
* 965	tools) .For process control and configuration	* FOR 200	Indexed book or notebook (345/350)
J 0 3	process control and configuration		

[#] Title Change
* Newly Established Subclass

[@] Indent Change & Position Change

CLASS 715 DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT, OPERATOR INTERFACE PROCESSING, AND SCREEN SAVER DISPLAY PROCESSING

OCTOBER 2004

OPERATOR INTERFACE (345/326)

.On-screen workspace or object (345/339)

..Icon (345/348)

...Metaphoric icon object (345/349)

* FOR 201Office layout (e.g., filing cabinet, desk) (345/351)

* FOR 202 ..Menu (345/352)

* FOR 203 ...Sub-menu structure (345/353)

* FOR 204 ... Using button array (345/354)

* FOR 205 ..Interface represented by 3D space (345/355)

* FOR 206 ..Hierarchy or network structure (345/356)

* FOR 207 ...Navigation within structure (345/357)

* FOR 208 .Gestured-based (345/358)

@ Indent Change & Position Change

[#] Title Change
* Newly Established Subclass

CLASSIFICATION ORDER 1836 October 5, 2004

Project No. E-6687

New Classification	Number Of ORs	Source Classification	Number of ORs
715/700	73	345/700	73
715/701	9	345/701	9
715/702	8	345/702	8
715/703	11	345/703	11
715/704	9	345/704	9
715/705	35	345/705	35
715/706	7	345/706	7
715/707	17	345/707	17
715/708	36	345/708	36
715/709	22	345/709	22
715/710	10	345/710	10
715/711	16	345/711	16
715/712	8	345/712	8
715/713	4	345/713	4
715/714	4	345/714	4
715/715	4	345/715	4
715/716	92	345/716	92
715/717	23	345/717	23
715/718	14	345/718	14
715/719	45	345/719	45
715/720	22	345/720	22
715/721	52	345/721	52
715/722	3	345/722	3
715/723	114	345/723	114

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Project No. E-6687

New Classification	Number Of ORs	Source Classification	
715/724	3	345/724	3
715/725	2	345/725	2
715/726	11	345/726	11
715/727	22	345/727	22
715/728	6	345/728	6
715/729	6	345/729	6
715/730	15	345/730	15
715/731	2	345/731	2
715/732	9	345/732	9
715/733	75	345/733	75
715/734	19	345/734	19
715/735	16	345/735	16
715/736	26	345/736	26
715/737	1	345/737	1
715/738	24	345/738	24
715/739	7	345/739	7
715/740	17	345/740	17
715/741	17	345/741	17
715/742	2	345/742	2
715/743	2	345/743	2
715/744	101	345/744	101
715/745	29	345/745	29
715/746	23	345/746	23
715/747	18	345/747	18

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Project No. E-6687

New Classification	Number Of ORs	Source Classification	Number of ORs
715/748	19	345/748	19
715/749	10	345/749	10
715/750	2	345/750	2
715/751	61	345/751	61
715/752	14	345/752	14
715/753	38	345/753	38
715/754	3	345/754	3
715/755	6	345/755	6
715/756	6	345/756	6
715/757	11	345/757	11
715/758	11	345/758	11
715/759	15	345/759	15
715/760	30	345/760	30
715/761	3	345/761	3
715/762	103	345/762	103
715/763	88	345/763	88
715/764	180	345/764	180
715/765	37	345/765	37
715/766	4	345/766	4
715/767	13	345/767	13
715/768	13	345/768	13
715/769	56	345/769	56
715/770	2	345/770	2
715/771	42	345/771	42

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New Classification	Number Of ORs	Source Classification	Number of ORs
715/772	25	345/772	25
715/773	6	345/773	6
715/774	2	345/774	2
715/775	21	345/775	21
715/776	34	345/776	34
715/777	16	345/777	16
715/778	11	345/778	11
715/779	18	345/779	18
715/780	13	345/780	13
715/781	73	345/781	73
715/782	15	345/782	15
715/783	14	345/783	14
715/784	68	345/784	68
715/785	15	345/785	15
715/786	53	345/786	53
715/787	16	345/787	16
715/788	80	345/788	80
715/789	5	345/789	5
715/790	42	345/790	42
715/791	6	345/791	6
715/792	15	345/792	15
715/794	16	345/794	16
715/795	2	345/795	2
715/797	23	345/797	23

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New Classification	Number Of ORs	Source Classification	
715/798	24	345/798	24
715/799	13	345/799	13
715/800	36	345/800	36
715/801	6	345/801	6
715/802	16	345/802	16
715/803	54	345/803	54
715/804	75	345/804	75
715/805	18	345/805	18
715/806	19	345/806	19
715/807	40	345/807	40
715/808	39	345/808	39
715/809	28	345/809	28
715/810	113	345/810	113
715/811	14	345/811	14
715/812	5	345/812	5
715/813	2	345/813	2
715/814	4	345/814	4
715/815	10	345/815	10
715/816	2	345/816	2
715/817	5	345/817	5
715/818	1	345/818	1
715/819	1	345/819	1
715/820	1	345/820	1
715/821	14	345/821	14

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New Classification	Number Of ORs	Source Classification	
715/822	7	345/822	7
715/823	34	345/823	34
715/824	1	345/824	1
715/825	13	345/825	13
715/826	12	345/826	12
715/827	6	345/827	6
715/828	4	345/828	4
715/829	1	345/829	1
715/830	5	345/830	5
715/833	14	345/833	14
715/834	17	345/834	17
715/835	108	345/835	108
715/836	6	345/836	6
715/837	26	345/837	26
715/838	16	345/838	16
715/839	70	345/839	70
715/840	45	345/840	45
715/841	60	345/841	60
715/842	2	345/842	2
715/843	7	345/843	7
715/844	2	345/844	2
715/845	3	345/845	3
715/846	20	345/846	20
715/847	5	345/847	5

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New Classification	Number Of ORs	Source Classification	Number of ORs
715/848	64	345/848	64
715/849	5	345/849	5
715/850	19	345/850	19
715/851	4	345/851	4
715/852	3	345/852	3
715/853	125	345/853	125
715/854	102	345/854	102
715/855	16	345/855	16
715/856	117	345/856	117
715/857	17	345/857	17
715/858	15	345/858	15
715/859	4	345/859	4
715/860	21	345/860	21
715/861	21	345/861	21
715/862	27	345/862	27
715/863	61	345/863	61
715/864	8	345/864	8
715/865	2	345/865	2
715/866	60	345/866	60
715/867	10	345/867	10

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Source Classification		Classification	
345/700	73	715/700	73
345/701	9	715/701	9
345/702	8	715/702	8
345/703	11	715/703	11
345/704	9	715/704	9
345/705	35	715/705	35
345/706	7	715/706	7
345/707	17	715/707	17
345/708	36	715/708	36
345/709	22	715/709	22
345/710	10	715/710	10
345/711	16	715/711	16
345/712	8	715/712	8
345/713	4	715/713	4
345/714	4	715/714	4
345/715	4	715/715	4
345/716	92	715/716	92
345/717	23	715/717	23
345/718	14	715/718	14
345/719	45	715/719	45
345/720	22	715/720	22
345/721	52	715/721	52
345/722	3	715/722	3
345/723	114	715/723	114

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Project No. E-6687

Source Classification		New Classification	
345/724	3	715/724	3
345/725	2	715/725	2
345/726	11	715/726	11
345/727	22	715/727	22
345/728	6	715/728	6
345/729	6	715/729	6
345/730	15	715/730	15
345/731	2	715/731	2
345/732	9	715/732	9
345/733	75	715/733	75
345/734	19	715/734	19
345/735	16	715/735	16
345/736	26	715/736	26
345/737	1	715/737	1
345/738	24	715/738	24
345/739	7	715/739	7
345/740	17	715/740	17
345/741	17	715/741	17
345/742	2	715/742	2
345/743	2	715/743	2
345/744	101	715/744	101
345/745	29	715/745	29
345/746	23	715/746	23
345/747	18	715/747	18
345/748	19	715/748	19

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Source Classification	Number of ORs	New Classification	Number of ORs
345/749	10	715/749	10
345/750	2	715/750	2
345/751	61	715/751	61
345/752	14	715/752	14
345/753	38	715/753	38
345/754	3	715/754	3
345/755	6	715/755	6
345/756	6	715/756	6
345/757	11	715/757	11
345/758	11	715/758	11
345/759	15	715/759	15
345/760	30	715/760	30
345/761	3	715/761	3
345/762	103	715/762	103
345/763	88	715/763	88
345/764	180	715/764	180
345/765	37	715/765	37
345/766	4	715/766	4
345/767	13	715/767	13
345/768	13	715/768	13
345/769	56	715/769	56
345/770	2	715/770	2
345/771	42	715/771	42
345/772	25	715/772	25
345/773	6	715/773	6

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		Classification	Number of ORs
345/774	2	715/774	2
345/775	21	715/775	21
345/776	34	715/776	34
345/777	16	715/777	16
345/778	11	715/778	11
345/779	18	715/779	18
345/780	13	715/780	13
345/781	73	715/781	73
345/782	15	715/782	15
345/783	14	715/783	14
345/784	68	715/784	68
345/785	15	715/785	15
345/786	53	715/786	53
345/787	16	715/787	16
345/788	80	715/788	80
345/789	5	715/789	5
345/790	42	715/790	42
345/791	6	715/791	6
345/792	15	715/792	15
345/794	16	715/794	16
345/795	2	715/795	2
345/797	23	715/797	23
345/798	24	715/798	24
345/799	13	715/799	13
345/800	36	715/800	36

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		New Classification	
345/801	6	715/801	6
345/802	16	715/802	16
345/803	54	715/803	54
345/804	75	715/804	75
345/805	18	715/805	18
345/806	19	715/806	19
345/807	40	715/807	40
345/808	39	715/808	39
345/809	28	715/809	28
345/810	113	715/810	113
345/811	14	715/811	14
345/812	5	715/812	5
345/813	2	715/813	2
345/814	4	715/814	4
345/815	10	715/815	10
345/816	2	715/816	2
345/817	5	715/817	5
345/818	1	715/818	1
345/819	1	715/819	1
345/820	1	715/820	1
345/821	14	715/821	14
345/822	7	715/822	7
345/823	34	715/823	34
345/824	1	715/824	1
345/825	13	715/825	13

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	of ORs	New Classification	Number of ORs
345/826	12	715/826	12
345/827	6	715/827	6
345/828	4	715/828	4
345/829	1	715/829	1
345/830	5	715/830	5
345/833	14	715/833	14
345/834	17	715/834	17
345/835	108	715/835	108
345/836	6	715/836	6
345/837	26	715/837	26
345/838	16	715/838	16
345/839	70	715/839	70
345/840	45	715/840	45
345/841	60	715/841	60
345/842	2	715/842	2
345/843	7	715/843	7
345/844	2	715/844	2
345/845	3	715/845	3
345/846	20	715/846	20
345/847	5	715/847	5
345/848	64	715/848	64
345/849	5	715/849	5
345/850	19	715/850	19
345/851	4	715/851	4
345/852	3	715/852	3

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Source Classification	Number of ORs	New Classification	Number of ORs
345/853	125	715/853	125
345/854	102	715/854	102
345/855	16	715/855	16
345/856	117	715/856	117
345/857	17	715/857	17
345/858	15	715/858	15
345/859	4	715/859	4
345/860	21	715/860	21
345/861	21	715/861	21
345/862	27	715/862	27
345/863	61	715/863	61
345/864	8	715/864	8
345/865	2	715/865	2
345/866	60	715/866	60
345/867	10	715/867	10

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C. CHANGES TO THE U.S. - I.P.C. CONCORDANCE

<u>U.S</u> .		I.P.C.	
Class	Subclass	Subclass	Notation
715	700-715	G06F	3/00 9/00 17/00
	716-722	H04N	5/44 7/173
		G11B	27/00
	723-726	G11B	27/00
	727-867	G06F	3/00 9/00 17/00

CLASS 340 - COMUNICATIONS: ELECTRICAL

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 995.16: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for a graphical user interface.

CLASS 342 – COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES (E.G., RADAR, RADIO NAVIGATION)

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Defintion: In Section II, References to Other Classes, under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475 for computer graphics processing.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for computer operator interface processing.

Subclass 183: Under See or Search Class:

Delete:

The entire reference to Class 345.

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 157-167 for a cursor mark position control device.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 856-862 for a cursor operator interface.

CLASS 343 – COMMUNICATIONS: RADIO WAVE ANTENNAS

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Defintion: In Section III, References to Other Classes, under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475 for computer graphics processing.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for computer operator interface processing.

CLASS 345 – COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS

DEFINITIONS ABOLISHED:

Subclasses

700-867

Cross-References:

961-970, 970.1, 971-978

Foreign:

FOR 176 - FOR 208

<u>DEFINITIONS MODIFIED</u> (Place modifications in numerical sequence, where applicable):

Class Title: The class title:

Delete:

COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS

Insert:

COMPUTER GRAPHICS PROCESSING AND SELECTIVE VISUAL DISPLAY SYSTEMS

Class 345 Title Changes in

External Classes: Change Class 345 title as indicated in the external classes listed below:

Delete the old title for Class 345:

COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS

<u>Insert the following new title for Class 345:</u>

COMPUTER GRAPHICS PROCESSING AND SELECTIVE VISUAL DISPLAY SYSTEMS

<u>List of Classes and See or Search Class References with Class 345 Title Changes:</u>

Class 40 (Class 345 title changed in See or Search Class (SC) locations below.)

- 40, Class Definition/References to Other Classes/SC 345
- 40, 447/SC 345
- 40, 448/SC 345
- 40, 449/SC 345
- 40, 450/SC 3450
- 40, 451/SC 345
- 40, 452/SC 345
- 40, 463/SC 345
- 40, 541/SC 345

Class 178 (Class 345 title changed in See or Search Class (SC) locations below.)

- 178, 18.01/SC 345
- 178, 18.02/SC 345
- 178, 18.03/SC 345
- 178, 18.04/SC 345
- 178, 18.09/SC 345
- 178, 19.01/SC 345
- 178, 19.02/SC 345
- 178, 19.03//SC 345
- 178, 19.04//SC 345

178, 19.05//SC 345

178, 20.01//SC 345

178, 20.02//SC 345

178, 20.03//SC 345

178, 23//SC 345

178, 118//SC 345

Class 200 (Class 345 title changed in See or Search Class (SC) locations below.)

200, 46/SC 345

200, 600/SC 345

Class 235 (Class 345 title changed in See or Search Class (SC) locations below.)

235, Class Definition/References to Other Classes/SC 345

235, 462.49/SC 345

235, 472.03/SC 345

Class 248 (Class 345 title changed in See or Search Class (SC) locations below.)

248, 917/SC 345

Class 250 (Class 345 title changed in See or Search Class (SC) locations below.)

250, Class Definition/References to Other Classes/SC 345

250, 200/SC 345

250, 227.13/SC 345

Class 252 (Class 345 title changed in See or Search Class (SC) locations below.)

252, 299.01/SC 345

Class 257 (Class 345 title changed in See or Search Class (SC) locations below.)
257, Class Definition/References to Other Classes/SC 345
Class 273 (Class 345 title changed in See or Search Class (SC) locations below.)
273 , Class Definition/References to Other Classes/SC 345
Class 307 (Class 345 title changed in See or Search Class (SC) locations below.)
307, Class Definition/References to Other Classes/SC 345
Class 313 (Class 345 title changed in See or Search Class (SC) locations below.)
313, 483/SC 345
313, 500/SC 345
313, 510/SC 345
313, 513/SC 345
313, 582/SC 345
Class 315 (Class 345 title changed in See or Search Class (SC) locations below.)
315, Class Definition/References to Other Classes/SC 345
315, 292/SC 345
315, 314/SC 345
315, 316/SC 345
315, 319/SC 345
315, 364/SC 345
315, 365/SC 345

315, 367/SC 345

315, 368.11/SC 345

315, 379/SC 345

315, 385/SC 345

Class 324 (Class 345 title changed in See or Search Class (SC) locations below.)

324, 770 /SC 345

Class 340 (Class 345 title changed in See or Search Class (SC) locations below.)

340, Class Definition/References to Other Classes/SC 345

340, 5.32/SC 345

340, 5.91 /SC 345

340, 7.51/SC 345

340, 7.55/SC 345

340, 756/SC 345

340, 14.1/SC 345

340, 286.01/SC 345

340, 286.13/SC 345

340, 407.1/SC 345

340, 407.2/SC 345

340, 691.6/SC 345

340, 815.4/SC 345

340, 815.43/SC 345

340, 815.44/SC 345

340, 815.45/SC 345

340, 815.53/SC 345

340, 815.54/SC 345

340, 815.57/SC 345 340, 815.58/SC 345 340, 815.65/SC 345 340, 815.75/SC 345 340, 815.83/SC 345 340, 815.86/SC 345 340, 825/SC 345 340, 915/SC 345 Class 341 (Class 345 title changed in See or Search Class (SC) locations below.) 341, Class Definition/References to Other Classes/SC 345 341, 20/SC 345 341, 22/SC 345 341, 23/SC 345 Class 342 (Class 345 title changed in See or Search Class (SC) locations below.) 342, Class Definition/References to Other Classes/SC 345 342, 176/SC 345 342 183/SC 345 Class 343 (Class 345 title changed in See or Search Class (SC) locations below.)

343, Class Definition/References to Other Classes/SC 345

Class 348 (Class 345 title changed in See or Search Class (SC) locations below.)

348, Class Definition/References to Other Classes/SC 345

348, 14.08/SC 345

348, 115/SC 345

348, 211.12/SC 345
348, 211.13/SC 345
348, 211.7/SC 345
348, 211.8/SC 345
348, 739/SC 345
348, 800/SC 345
348, 817/SC 345
Class 349 (Class 345 title changed in See or Search Class (SC) locations below.)
349, Class Definition/References to Other Classes/SC 345
349, 33/SC 345
349, 41/SC 345
349, 50/SC 345
349, 53/SC 345
349, 54/SC 345
349, 72/SC 345
349, 85/SC 345
349, 100/SC 345
349, 173/SC 345
349, 199/SC 345
Class 356 (Class 345 title changed in See or Search Class (SC) locations below.)
356, Class Definition/References to Other Classes/SC 345
Class 359 (Class 345 title changed in See or Search Class (SC) locations below.)
359, 1/SC 345

359, 13/SC 345

359, 240/SC 345
359, 242/SC 345
359, 265/SC 345
359, 276/SC 345
359, 277/SC 345
Class 360 (Class 345 title changed in See or Search Class (SC) locations below.)
360, Class Definition/References to Other Classes/SC 345
Class 361 (Class 345 title changed in See or Search Class (SC) locations below.)
361, 681/SC 345
361, 684/SC 345
Class 362 (Class 345 title changed in See or Search Class (SC) locations below.)
362, 552/SC 345
362, 583/SC 345
Class 365 (Class 345 title changed in See or Search Class (SC) locations below.)
365, Class Definition/References to Other Classes/SC 345
365, 108/SC 345
365, 111/SC 345
365, 116/SC 345
Class 368 (Class 345 title changed in See or Search Class (SC) locations below.)
368 Class Definition/References to Other Classes/SC 345
368, 30/SC 345

368, 68/SC 345

368, 70/SC 345
368, 79/SC 345
368, 82/SC 345
368, 83/SC 345
368, 84/SC 345
368, 223/SC 345
368, 239/SC 345
368, 241/SC 345
368, 242/SC 345
Class 369 (Class 345 title changed in See or Search Class (SC) locations below.)
369, 47.32/SC 345
Class 370 (Class 345 title changed in See or Search Class (SC) locations below.)
370, Class Definition/References to Other Classes/SC 345
Class 377 (Class 345 title changed in See or Search Class (SC) locations below.)
377, 112/SC 345
Class 378 (Class 345 title changed in See or Search Class (SC) locations below.)
Class 378 (Class 345 title changed in See or Search Class (SC) locations below.) 378 98/SC 345
378 98/SC 345
378 98/SC 345 Class 379 (Class 345 title changed in See or Search Class (SC) locations below.)
378 98/SC 345 Class 379 (Class 345 title changed in See or Search Class (SC) locations below.) 379 88.11/SC 345

Class 382 (Class 345 title changed in See or Search Class (SC) locations below.)

387	Class Definition/References to	Other Classes/SC 3/15
304.	Class Deliminon/References to	

- 382 108/SC 345
- 382 154/SC 345
- 382 162/SC 345
- 382 169/SC 345
- 382 207/SC 345
- 382 232/SC 345
- 382 237/SC 345
- 382 241/SC 345
- 382 242/SC 345
- 382 256/SC 345
- 382 269/SC 345
- 382 274/SC 345
- 382 279/SC 345
- 382 282/SC 345
- 382 284/SC 345
- 382 285/SC 345
- 382 293/SC 345
- 382 295/SC 345
- 382 296/SC 345
- 382 298/SC 345
- 382 299/SC 345
- 382 301/SC 345
- 382 302/SC 345

382 311/SC 345
382 313/SC 345
382 314/SC 345
382 315/SC 345
Class 385 (Class 345 title changed in See or Search Class (SC) locations below.)
385 Class Definition/References to Other Classes/SC 345
385 24/SC 345
385 116/SC 345
Class 386 (Class 345 title changed in See or Search Class (SC) locations below.)
386 Class Definition/References to Other Classes/SC 345
386 130/SC 345
Class 396 (Class 345 title changed in See or Search Class (SC) locations below.)
396 88/SC 345
396 147/SC 345
396 163/SC 345
396 201/SC 345
396 239/SC 345
396 255/SC 345
396 281/SC 345
396 282/SC 345
396 287/SC 345
396 287/SC 345 396 289/SC 345
396 289/SC 345

Class 400 (Class 345 title changed in See or Search Class (SC) locations below.)

400, 118.2/SC 345

Class 428 (Class 345 title changed in See or Search Class (SC) locations below.)

428, 1.1/SC 345

Class 434 (Class 345 title changed in See or Search Class (SC) locations below.)

434 Class Definition/References to Other Classes/SC 34

Class 438 (Class 345 title changed in See or Search Class (SC) locations below.)

438, 30/SC 345

Class 455 (Class 345 title changed in See or Search Class (SC) locations below.)

455, 154.1/SC 345

455, 158.1/SC 345

Class 463 (Class 345 title changed in See or Search Class (SC) locations below.)

463 Class Definition/References to Other Classes/SC 34

463, 1/SC 345

463, 30/SC 345

463, 31/SC 345

463, 32/SC 345

Class 473 (Class 345 title changed in See or Search Class (SC) locations below.)

473 Class Definition/References to Other Classes/SC 34

473, 54/SC 345

473, 67/SC 345

Class 482 (Class 345 title changed in See or Search Class (SC) locations below.)

482, 902/SC 345

Class 700 (Class 345 title changed in See or Search Class (SC) locations below.)

700, Class Definition/References to Other Classes/SC 34

700, 15/SC 345

700, 17/SC 345

700, 27/SC 345

700, 83/SC 345

700, 98/SC 345

Class 702 (Class 345 title changed in See or Search Class (SC) locations below.)

702, 16/SC 345

702, 67/SC 345

702, 68/SC 345

Class 703 (Class 345 title changed in See or Search Class (SC) locations below.)

703, Class Definition/References to Other Classes/SC 34

703, 2/SC 345

Class 704 (Class 345 title changed in See or Search Class (SC) locations below.)

704, Class Definition/References to Other Classes/SC 34

704, 8/SC 345

Class 705 (Class 345 title changed in See or Search Class (SC) locations below.)

705, Class Definition/References to Other Classes/SC 34

Class 706 (Class 345 title changed in See or Search Class (SC) locations below.)

706, Class Definition/References to Other Classes/SC 34

706, 11/SC 345

706, 60/SC 345

Class 707 (Class 345 title changed in See or Search Class (SC) locations below.)

707, Class Definition/References to Other Classes/SC 34

707, 1/SC 345

707, 3/SC 345

707, 8/SC 345

707, 9/SC 345

707, 10/SC 345

707, 100/SC 345

707, 101/SC 345

707, 102/SC 345

707, 103/SC 345

707, 200/SC 345

707, 201/SC 345

Class 708 (Class 345 title changed in See or Search Class (SC) locations below.)

708, Class Definition/References to Other Classes/SC 34

708, 131/SC 345

708, 142/SC 345

708, 144/SC 345

708, 160/SC 345

Class 709 (Class 345 title changed in See or Search Class (SC) locations below.)

709, Class Definition/References to Other Classes/SC 34

709, 200/SC 345

709, 203/SC 345

709, 204/SC 345

709, 205/SC 345

709, 213/SC 345

709, 234/SC 345

Class 710 (Class 345 title changed in See or Search Class (SC) locations below.)

710, Class Definition/References to Other Classes/SC 34

710, 1/SC 345

710, 67/SC 345

710, 72/SC 345

710, 73/SC 345

Class 711 (Class 345 title changed in See or Search Class (SC) locations below.)

711, Class Definition/References to Other Classes/SC 34

711, 1/SC 345

711, 100/SC 345

711, 200/SC 345

Class 712 (Class 345 title changed in See or Search Class (SC) locations below.)

712, Class Definition/References to Other Classes/SC 34

712, 1/SC 345
712, 31/SC 345
712, 32/SC 345
712, 34/SC 345
712, 220/SC 345
712, 223/SC 345
712, 228/SC 345
712, 232/SC 345
712, 242/SC 345
Class 713 (Class 345 title changed in See or Search Class (SC) locations below.)
713, Class Definition/References to Other Classes/SC 34
713, 1/SC 345
713, 100/SC 345
Class 714 (Class 345 title changed in See or Search Class (SC) locations below.)
714, 46/SC 345
714, 57/SC 345
714, 738/SC 345
Class 715 (Class 345 title changed in See or Search Class (SC) locations below.)
715, Class Definition/References to Other Classes/SC 34
715, 500.1/SC 345
715, 501.1/SC 345
715, 510/SC 345
715, 511/SC 345
715, 513/SC 345

715, 515/SC 345
715, 526/SC 345
715, 535/SC 345
715, 541/SC 345
715, 542/SC 345
Class 716 (Class 345 title changed in See or Search Class (SC) locations below.)
716, Class Definition/References to Other Classes/SC 34
716, 11/SC 345
Class 717 (Class 345 title changed in See or Search Class (SC) locations below.)
717, Class Definition/References to Other Classes/SC 34
717, 100/SC 345
717, 102/SC 345
717, 105/SC 345
717, 106/SC 345
717, 109/SC 345
717, 113/SC 345
717, 114/SC 345
717, 123/SC 345
717, 125/SC 345
717, 162/SC 345
Class 718 (Class 345 title changed in See or Search Class (SC) locations below.)
718, Class Definition/References to Other Classes/SC 34
718, 104/SC 345

718, 105/SC 345

Class 719 (Class 345 title changed in See or Search Class (SC) locations below.)

719, Class Definition/References to Other Classes/SC 34

719, 315/SC 345

719, 328/SC 345

719, 329/SC 345

Class 725 (Class 345 title changed in See or Search Class (SC) locations below.)

725, Class Definition/References to Other Classes/SC 34

725, 32/SC 345

725, 37/SC 345

725, 135/SC 345

Class 902 (Class 345 title changed in See or Search Class (SC) locations below.)

902, 20/SC 345

902, 21/SC 345

Class D14 (Class 345 title changed in See or Search Class (SC) locations below.)

D14, 485/SC 345

D14, 486/SC 345

D14, 488/SC 345

D14, 89/SC 345

Class Definition: The class definition

<u>Delete</u> (the entire sections):

SECTION I - CLASS DEFINITION

SECTION II – REFERENCES TO OTHER CLASSES

SECTION III - GLOSSARY

Insert:

SECTION I - CLASS DEFINITION

This class provides for processes and apparatus for selective electrical control of two or more light-generating or light-controlling display elements* in accordance with a received or stored image data signal. The image data includes character, graphical information or display attribute data. The image data may include, for example, information data from a peripheral input device, from the reception of a television signal, from the recognition of image data, or from the generation or creation of image data by a computer.

This class also provides for digital data processing systems or methods for data processing for visual presentation, wherein the processing of data includes the creation or manipulation of graphic objects (e.g., artificial images), or text.

SCOPE OF THE CLASS

- (1) Note. This class includes a display controller* for accessing image data. The display control includes, for example, control between a display memory and the display elements*. The display control may be performed by a processor, wherein enhancements for a previously created and stored image are provided. Examples of such display control include display memory addressing, display screen energizing, and received image data control in response to input signals applied to the display control to provide an enhanced image for display. A specific display system* in combination with a data processor or computer is classified herein.
- (2) Note. The display elements* of this class include, for example, (1) a CRT display wherein visual elements* of the image or message originate at the light-emitting screen of a cathode-ray tube, (2) a flat panel display (non-CRT display system*) wherein visual elements* of image or message are the result of light producers or light controllers arranged in a tangible mechanical grouping or array, (3) any matrix arrangement of light-generating or light-controlling display elements* with selective electrical display control, or (4) any plural arrangement of segmented light-generating or light-controlling display elements* with selective electrical display control.

- (3) Note. Claimed subject matter directed to a display function (waveform) generator combined with a display is classified herein unless there is claimed structure relating to the manner in which the waveform is detected or measured.
- (4) Note. Generally, significantly claimed structure external to this class, claimed in combination with subject matter under the class definition above, which displays or produces an image or message related to such external structure or its function, is classified in the class appropriate to the external structure; however, a significantly claimed operator interface claimed in combination with computer graphics processing such as attribute processing or graphic manipulation, which displays or produces an image or message related to such operator interface is classified herein. Further, nominally claimed structure external to this class, claimed in combination with subject matter under this class definition, is classified in this class unless provided for in the appropriate external class.
- (5) Note. This class provides for peripheral input devices which include a manually actuatable selective means (e.g., keyboards, light pens, joysticks, mice, and touch tablets etc.) to selectively input the information data to the selective display control which translates the selective input into a message symbol or image, (e.g., a character or graphic object) on the display to an observer.
- (6) Note. This class also provides for display storage devices such as display memory with more than nominal recitation of their organization and structure claimed for storing the previously created or generated data to be displayed on the display.
- (7) Note. Graphic objects of this class are defined by their coordinates, shape, size, and attributes. Such graphic objects define a portion of a displayed image and may be a combination of computer generated objects and real life images.
- (8) Note. Information processing for creating a visual image which includes more than a nominal recitation of information processing is classified herein.
- (9) Note. The use of a memory system for processing in conjunction with a data presentation/computer graphics system (e.g., for manipulating the addressing or contents of image or text data stored in a memory) is classified herein.

- (10) Note. Font generation for display and font processing to form the character patterns is classified herein.
- (11) Note. Color information processing wherein the color in the image is calculated, is classified herein (e.g., shading, interpolating color values in a polygon).
- (12) Note. Generation or manipulation of three dimensional or perspective display information or objects, generation or control of a mapping pattern, or animation are classified in this class.
- (13) Note. Systems which display a change of appearance, where the change is computer generated (e.g., creation or modification of hairstyles or clothing to be overlaid with a video image or a model), are classified in this class.

SECTION II - REFERENCES TO OTHER CLASSES

SEE OR SEARCH CLASS:

- 40, Card, Picture, or Sign Exhibiting, particularly subclass 406 for display device with gas or liquid movement.
- 74, Machine Element or Mechanism, particularly subclass 471 for control elements which move in two planes.
- 116, Signals and Indicators, particularly subclasses 200-337 for various indicators.
- 178, Telegraphy, particularly subclasses 18.01-20.04 for digitizing writing tablets, stylus, and circuits.
- 200, Electricity: Circuit Makers and Breakers, particularly subclass 5 for multiple switch control.
- 235, Registers, particularly subclasses 375-386 for systems controlled by data bearing records which may include selective display; various subclasses for basic machines and associated indicating mechanisms for ascertaining the number of movements of various devices and machines, plus machines made from these basic machines alone (e.g., cash registers, voting machines), and in combination with various perfecting features, such as printers and recording means.
- 250, Radiant Energy, subclasses 200-239 for light detection using photocell circuitry and subclass 553 for light source array or matrix.

- 257, Active Solid-State Devices (e.g., Transistors, Solid-State Diodes), appropriate subclasses for single, plural, and integrated element solid-state light source.
- 273, Amusement Devices: Games, appropriate subclasses for TV games using display device.
- 313, Electric Lamp and Discharge Devices, appropriate subclasses for some light sources, per se, particularly subclasses 484-493 for gaseous discharge display panel and subclasses 498-512 for solid-state type device.
- 315, Electric Lamp and Discharge Devices: Systems, appropriate subclasses for structure of cathode-ray tube energizing circuits and subclasses 169.1 –169.4 for structure of panel display devices (e.g., electroluminescent and gas display).
- 324, Electricity: Measuring and Testing, subclass 121 for measuring and testing electricity using a CRT.
- 326, Electronic Digital Logic Circuitry, appropriate subclasses for electronic digital logic circuits; and appropriate subclasses for generic digital logic devices, circuitry, and subcombinations thereof, wherein nonarithmetical operations are performed upon discrete electrical signals representing a value normally described by numerical digits.
- 327, Miscellaneous Active Electrical Nonlinear Devices, Circuits, and Systems, subclasses 108-112 for miscellaneous current driving circuits.
- 340, Communications: Electrical, subclasses 825 through 825.98 for controlling one or more devices to obtain a plurality of results by transmission of a designated one of plural distinctive control signals over a smaller number of communication lines or channels, particularly subclasses 2.1-2.8 for path selection, subclasses 3.1-3.9 for communication systems where status of a controlled device is communicated, subclass 825.02 for tree or cascade selective communication, subclasses 825.2-825.21 for synchronizing selective communication systems, subclasses 825.5-825.51 for lockout or priority in selective communication systems, subclasses 825.52 and 825.53 for addressing, and subclasses 825.57-825.69 for pulse responsive actuation.
- 341, Coded Data Generation or Conversion, subclasses 22-34 for bodily actuated code generation relating to a keyboard; and various subclasses for electrical pulse and digit code converters (e.g., systems for originating or emitting a coded set of discrete signals or translating one code into another code wherein the meaning of the data remains the same but the formats may differ).

- 342, Communications: Directive Radio Wave Systems and Devices (e.g., Radar, Radio Navigation), subclass 142 for radar display systems using a CRT display.
- 348, Television, appropriate subclasses for systems and subsystems for display of television (real time scanned produced) signals.
- 349, Liquid Crystal Cells, Elements and Systems, appropriate subclasses for the details of a liquid crystal cell structure.
- 352, Optics: Motion Pictures, subclass 87 where motion picture animation will be found.
- 353, Optics: Image Projectors, appropriate subclasses for specifics of optics involved with an image projector.
- 358, Facsimile and Static Presentation Processing, subclasses 1.1 through 1.18 for static presentation processing.
- 359, Optics: Systems (Including Communication) and Elements, subclasses 237-324 for structure relating to an optical modulator and subclasses 443-461 for projection screens.
- 360, Dynamic Magnetic Information Storage or Retrieval (which is an integral part of Class 369 following subclass 18), appropriate subclasses for record carriers and systems wherein information is stored and retrieved by interaction with a medium and there is relative motion between a medium and a transducer, for example, magnetic disk drive devices and control thereof, per se.
- 362, Illumination, appropriate subclasses for a specific illumination device and particularly subclasses 227-252 for plural light sources for general lighting uses.
- 365, Static Information Storage and Retrieval, subclasses 106-119 and 120-128 for storage systems using visible light for the retrieval of stored information instead of for the display of a selected image (message or data); and various subclasses for addressable static singular storage elements or plural singular storage elements of the same type (i.e., the internal elements of memory, per se).
- 368, Horology: Time Measuring Systems or Devices, subclasses 223-242 for displays of time (i.e., watches).
- 369, Dynamic Information Storage or Retrieval, particularly subclasses 99-175 for information handling in conjunction with a dynamic store; and various subclasses for record carriers and systems wherein information

is stored and retrieved by interaction with a medium and there is relative motion between a medium and a transducer.

- 377, Electrical Pulse Counters, Pulse Dividers, or Shift Registers: Circuits and Systems, subclasses 112-113 for display control with registers; and various subclasses for generic circuits for pulse counting.
- 379, Telephonic Communications, subclass 96 for displaying digital information on a terminal.
- 380, Cryptography, appropriate subclasses for cryptographic electric signal modification in general.
- 382, Image Analysis, appropriate subclasses, for previously scanned image data and for image recognition, processing and nominal display relating to such recognition; and various subclasses for operations performed on image data with the aim of measuring a characteristic of an image, detecting variations, detecting structures, or transforming the image data, and for procedures for analyzing and categorizing patterns present in image data.
- 400, Typewriting Machines, particularly subclasses 83-85 for typewriting machines including a display.
- 434, Education and Demonstration, subclasses 1-10 for system performing distant object energy sensing wherein said systems include a display, subclasses 307 and 323 for educational system including a CRT.
- 463, Amusement Devices: Games, subclasses 1-47, where there is recited a method or apparatus for moving or processing information specified as game or contest information (e.g., a video game, etc.), especially subclasses 31-34 for specifics of processing visual information data in a game or contest appropriate for Class 463.
- 705, Data Processing: Financial, Business Practice, Management, or Cost/Price Determination, appropriate subclasses for user interface specific to business practice.
- 707, Data Processing: Database and File Management or Data Structures, subclasses 1 through 10 for database specific user interface.
- 708, Electrical Computers: Arithmetic Processing and Calculating, subclasses 270-277 for mathematical function generation and subclass 849 for specialized analog function generation including a CRT display.

- 713, Electrical Computers and Digital Processing Systems: Support, subclasses 187 and 188 for software program protection or computer virus detection in combination with data encryption.
- 714, Error Detection/Correction and Fault Detection/Recovery, appropriate subclasses for generic electrical pulse or pulse coded data error detection and correction.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, appropriate subclasses for document processing specific user interface, for an operator interface generally, or for screen saver display processing.

SECTION III - GLOSSARY

The following terms have been defined for purposes of classification in this class. In the class and subclass definition of this class, terms used in a sense defined below are indicated by an asterisk (*). When these terms are not indicated by an asterisk(*) in the definitions, the meaning is not restricted to the glossary definitions below.

ADDRESS DATA

Data that represent or identify a source or destination. (also see: Data)

ALPHANUMERIC

Any symbol found in the ASCII character set.

BUS

A conductor used for transferring data, signals, or power.

COMPUTER

A machine that inputs data, processes data, stores data, and outputs data.

DATA

Representation of information in a coded manner suitable for communication, interpretation, or processing. Also see: Address Data; Instruction Data; Status Data; User Data.

DATA PROCESSING

See PROCESSING, below.

DISPLAY CONTROLLER

An electrical circuit which actuates a display device* in accordance with received image data*.

DIGITAL DATA PROCESSING SYSTEM

An arrangement of processor(s) in combination with either memory or peripherals, or both, performing data processing.

DISPLAY DEVICE

A communication device which converts image data* into a visual image*.

DISPLAY ELEMENT

Means for producing a visual effect in a display device* comprised of a plurality (e.g., matrix) of such means.

DISPLAY SYSTEM

A system which comprises one or more display terminals* or one or more display devices*.

DISPLAY TERMINAL

A unit which comprises at least one display device* and user interface control means (e.g., mouse).

IMAGE DATA

The information provided to form the visual image*.

INFORMATION

Meaning that a human being assigns to data by means of the conventions applied to that data.

INSTRUCTION DATA

Data that represent an operation and identify its operands, if any. (also see: Data)

MEMORY

A functional unit to which data can be stored and from which data can be retrieved.

PERIPHERAL

A functional unit that transmits data to or receives data from a computer to which it is coupled.

PROCESSING

Methods or apparatus performing systematic operations upon data or information exemplified by functions such as data or information transferring, merging, sorting, and computing (i.e., arithmetic operations or logical operations).

- (1) Note. In this class, the glossary term data is used to modify processing in the term data processing; whereas the term digital data processing system refers to a machine performing data processing.
- (2) Note. In an effort to avoid redundant constructions, in this class, where appropriate, the term address data processing is used in place of address data data processing.

PROCESSOR

A functional unit that interprets and executes instruction data.

STATUS DATA

Data that represent conditions of data, digital data processing systems, computers, peripherals, memory, etc. (also see: Data)

USER DATA

Data other than address data, instruction data, or status data. (also see: Data)

VISUAL ELEMENT

The smallest constituent part of a composite visual image*. A visual element* may be the visual effect produced by a display element*.

VISUAL IMAGE

The resultant image shown by the display device*.

Subclass 157: Under the subclass definition:

Delete:

The entire SEE OR SEARCH THIS CLASS, SUBCLASS heading and reference

Insert:

SEE OR SEARCH CLASS:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 856–862 for cursor manipulation.

Subclass 160: Under the subclass definition:

Delete:

The entire SEE OR SEARCH THIS CLASS, SUBCLASS heading and reference

Insert:

SEE OR SEARCH CLASS:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 856–862 for cursor manipulation.

Subclass 594: Under the subclass definition:

Delete:

The entire SEE OR SEARCH THIS CLASS, SUBCLASS heading and reference

Insert:

SEE OR SEARCH CLASS:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-867 for a graphical user interface, per se.

Subclass 684: Under the subclass definition:

Delete:

The entire SEE OR SEARCH THIS CLASS, SUBCLASS heading and reference

Insert:

SEE OR SEARCH CLASS

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 786-789, for a scrolling operation performed in a graphical user interface window environment.

.

CLASS 348 – TELEVISION

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 157: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for operator interface processing.

Subclass 14.08 Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 733-759 for concurrently established related or collaborative user interfaces including computer conferencing and computer supported cooperative work.

Subclass 211.12: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 733-759 for concurrently established related or collaborative user

interfaces including computer conferencing and computer supported cooperative work.

CLASS 355 - PHOTOCOPYING

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Definition: In Section III, under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 467 through 472for char font generation and subclasses 700-867 for operator interface processing.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document processing performed by a computer for presentation.

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 467-472.3 for character font generation.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document processing performed by a computer for presentation, and subclasses 700-866 for operator interface processing.

CLASS 358 - FACSIMILE AND STATIC PRESENTATION PROCESSING

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Definition: In Section II, References to other Classes, under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 418 through 475for computer graphics processing, especially subclasses 581-618 for display attribute control, and subclasses 700-866 for a graphical computer operator interface.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document presentation processing.

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475 for computer graphics processing, especially subclasses 581-618 for display attribute control.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document processing performed by a computer for presentation, and subclasses 700-866 for operator interface processing.

Subclass 400: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 467 through 472 for character font generation and subclasses 700 through 867for operator interface processing.
- Data Processing: Presentation Processing of Document, appropriate subclasses for document processing performed by a computer for presentation.

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 467-472.3 for character font generation.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document processing performed by a computer for presentation, and subclasses 700-866 for operator interface processing.

CLASS 360 - DYNAMIC MAGNETIC INFORMATION STORAGE OR RETRIEVAL

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Definition: In Section IV, References to Other Classes, under See or Search Class:

Delete:

The entire reference to Class 345

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475 for computer graphics processing.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for a computer operator interface.

CLASS 361 - ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 681: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 467 through 472 for character font generation and subclasses 700-867 for operator interface processing.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document processing performed by a computer for presentation

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 467-472.3 for character font generation.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document processing performed by a computer for presentation, and subclasses 700-866 for operator interface processing.

CLASS 382 - IMAGE ANALYSIS

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 311: Under See or Search Class:

Delete:

The entire reference to Class 345

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 156-184 for the use of input devices for controlling the display of an image.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for operator interfaces for controlling the display of an image.

CLASS 700 - DATA PROCESSING: GENERIC CONTROL SYSTEMS OR SPECIFIC APPLICATIONS

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 83: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for display operator interface.

CLASS 704 - DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 8: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclass 866 for customization or edition of operator interfaces.
- 715, Data Processing: Presentation Processing of Document, subclass 536 for composing or editing multiple languages in a document.

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclass 536 for composing or editing multiple languages in a document and subclass 866 for customization or edition of operator interfaces.

CLASS 706 - DATA PROCESSING - ARTIFICIAL INTELLIGENCE

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Definition: In Section II, references to Other Classes, under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475 for computer graphics processing.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for a computer operator interface.

Subclass 11: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475 for computer graphics processing.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for a computer operator interface.

Subclass 60: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for a computer operator interface.

CLASS 707 - DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA STRUCTURES

Definitions Modified (Place modifications in numerical sequence, where applicable):

Class Definition: In Section III, References to Other Classes, under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 700 through 867 for operator interfaces, subclasses 418-475 for computer graphics processing, subclasses 1.1-111 for visual display systems with selective electrical control including display memory organization and structure for storing image data and manipulating image data between a display memory and display device.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document presentation processing.

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475 for computer graphics processing, and subclasses 1.1-111 for visual display systems with selective electrical control including display memory organization and structure for storing image data and manipulating image data between a display memory and display device.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document processing performed by a computer for presentation, and subclasses 700-866 for operator interface processing.

Subclass 1: Under See or Search Class:

Delete:

345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 700 through 867 for operator interfaces, per se, in particular subclasses 866 for interface

customization, subclasses 764-862 for on-screen work or objects, and subclasses 810-845 for menus.

715, Data Processing: Presentation Processing of Document, appropriate subclasses for document processing, per se, particularly subclass 501.1 for processing a document including hypermedia, subclass 513 for processing a structured document (e.g., HTML, SGML, ODA, CDA), and subclasses 515-516 for compound documents.

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document presentation processing, per se, particularly subclass 501.1 for processing a document including hypermedia, subclass 513 for processing a structured document (e.g., HTML, SGML, ODA, CDA), and subclasses 515-516 for compound documents, and also subclasses 700-866 for operator interfaces, per se, in particular subclasses 866 for interface customization, subclasses 764-862 for on-screen work or objects, and subclasses 810-845 for menus.

Subclass 3: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 156+ for input devices such as mice, touch screens, etc., subclasses 700-867 for operator interfaces, per se, and in particular subclasses 764-862 for on-screen workspaces and objects, subclasses 781-807 for windowing, and subclass 808 for pop-up controls.
- 715, Data Processing: Presentation Processing of Document, subclasses 530 through 541 for text editing, composition or storage control.

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 156-184 for input devices such as mice, touch screens, etc.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 530-541 for text editing, composition or storage control, and subclasses 700-866 for operator interfaces, per se, in particular subclasses 764-862 for on-screen workspaces and objects, subclasses 781-807 for windowing, and subclass 808 for pop-up controls.

Subclass 8: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 716 through 726 for operator interface aspects of workgroup data processing environments for plural users or sites and cross-reference art collection 971 directed to interface aspects of cooperative decision support systems for groups of users.
- 715, Data Processing: Presentation Processing of Document, subclass 511 for document version management under document processing.

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclass 511 for document version management under document processing, and subclasses 716-726 for operator interface aspects of workgroup data processing environments for plural users or sites and cross-reference art collection 971 directed to interface aspects of cooperative decision support systems for groups of users.

Subclass 9: Under See os Search Class

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 716-726 for operator interface aspects of workgroup data processing environments for plural users or sites.

Subclass 10: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 716-726 for operator interface aspects of workgroup data processing environments for plural users or sites and cross-reference art collection 971 directed to interface aspects of cooperative decision support systems for groups of users.

Subclass 100: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for object-oriented operator interface elements, per se.

Subclass 101: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 716 through 726for operator interface aspects of workgroup data processing environments for plural users or sites and cross-reference art collection 971 directed to interface aspects of cooperative decision support systems for groups of users.
- 715, Data Processing: Presentation Processing of Document, subclass 511 for document version management under document processing.

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclass 511 for document version management under document processing, and subclasses 716-726 for operator interface aspects of workgroup data processing environments for plural users or sites and cross-reference art collection 971 directed to interface aspects of cooperative decision support systems for groups of users

Subclass 102: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 700 through 867for operator interfaces.
- 715, Data Processing: Presentation Processing of Document, subclass 501.1 for processing a document including hypermedia, subclass 513 for processing a structured document (e.g., HTML, SGML, ODA, CDA), subclasses 515-516 for processing a compound document using hierarchy control, subclasses 517– 525 for document layout processing including spacing control, format transforming, etc., and subclass 532 for text data document processing with a dictionary

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclass 501.1 for processing a document including hypermedia, subclass 513 for processing a structured document (e.g., HTML, SGML, ODA, CDA), subclasses 515-516 for processing a compound document using hierarchy control, subclasses 517-525 for document layout processing including spacing control, format transforming, etc., subclass 532 for text data document processing with a dictionary, and subclasses 700-866 for operator interfaces.

Subclass 103 Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 764 through 862 for onscreen workspaces or objects, and subclasses 810 through 845 for menus.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document processing, per se, in particular, subclass 501 for hypermedia, subclass 513 for structured documents (e.g., HTML, SGML, ODA, CDA), and subclasses 515-516 for compound documents.

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document processing, per se, in particular, subclass 501 for hypermedia, subclass 513 for structured documents (e.g., HTML, SGML, ODA, CDA), subclasses 515-516 for compound documents, and also subclasses 764-862 for on-screen workspaces or objects, particularly subclasses 810-845 for menus.

Subclass 200: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclass 866 for file content authoring, generating, producing, and edit in operator interface customization and editioning, and subclasses 467+ for file content authoring, generating, producing, and editing in font generation and animation.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for file content authoring, generating, producing, and editing in document processing, word processing, and text processing.

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 467-472.3 for file content authoring, generating, producing, and editing in font generation, and subclasses 473-475 for file content authoring, generating, producing, and editing in animation.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for file content authoring, generating, producing, and editing in document processing, word processing, and text processing.

Subclass 201: Under See or Search Class:

Delete:

345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 716 through 726 for operator interface aspects of workgroup data processing environments for plural users or sites and cross-reference art collection 971 directed to interface aspects of coop decision support systems for groups of users.

715, Data Processing: Presentation Processing of Document, subclass 511 for document version management under document processing.

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclass 511 for document version management under document processing, subclasses 733-759 for operator interface aspects of workgroup data processing environments for plural users or sites and cross-reference art collection 971 directed to interface aspects of cooperative decision support systems for groups of users.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

709 – ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING OR PLURAL PROCESSOR SYNCHRONIZATION

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 203: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for operator interfaces, and particularly subclass 744 for particular operator client/server interface customized by modifying links between interface features and routines performed.

Subclass 204: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 733-759 for concurrently established related or collaborative user interfaces including computer conferencing and computer supported cooperative work.

Subclass 205: Under See or Search Class:

Delete:

The entire reference to Class 345

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 1.1-3.4 for plural display systems.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 733-759 for operator interfaces for cooperative computer work.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

CLASS 712 - ELECTRICAL COMPUTERS AND DIGITAL DATA PROCESSING SYSTEMS: PROCESSING ARCHITECTURES AND INSTRUCTION PROCESSING (E.G. PROCESSORS)

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 228: Under See or Search Class:

Delete:

The entire reference to Class 345

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 581-618 for a display attribute controller.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 781-807 for operator interface windowing.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

Class 713 - ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: SUPPORT

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Definition: In Section II, References to Other Classes, under See or Search Class::

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 1.1 through 3.4 for visual display systems with selective electrical control including display memory organization and structure for storing image data and manipulating image data between a display memory and display peripheral; subclasses 156+ for display peripheral interface input device; subclasses 204+ for display driving control circuitry; subclasses 700-866 for computer operator interface; subclasses 418-475 for computer graphics processing; and subclasses 501+ for computer graphic processing systems.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document presentation processing.

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 1.1-3.4 for visual display systems with selective electrical control including display memory organization and structure for storing image data and manipulating image data between a display memory and display peripheral; subclasses 156-184 for display peripheral interface input device; subclasses 204-215 for display driving control circuitry; subclasses 418-475 for computer graphics processing; and subclasses 501-522 for computer graphic processing systems.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document presentation processing, and subclasses 700-866 for computer operator interface.

Subclass 1: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 866 for configuring an operator interface; cross-reference art collection 966 for computer process control or configuration in an operator interface.

Subclass 100: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclass 866 for operator interface configuring.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

Class 714 - ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 46: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for computer graphics operator interface.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

CLASS 715 - DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT

DEFINITIONS ESTABLISHED:

Subclasses

700-867

Cross-References:

961-970, 970.1, 971-978

Foreign:

FOR 176 - FOR 208

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Class Title: The class title:

Delete:

DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT

Insert:

DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT, OPERATOR INTERFACE PROCESSING, AND SCREEN SAVER DISPLAY PROCESSING

Class 715 Title Changes in

External Classes: Change Class 715 title as indicated in the external classes listed below:

Delete the old title for Class 715:

DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT

Insert the following new title for Class 715:

DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT, OPERATOR INTERFACE PROCESSING, AND SCREEN SAVER DISPLAY PROCESSING

<u>List of Classes and See or Search Class References with Class 715 Title Changes:</u>

Class 361 (Class 715 title changed in See or Search Class (SC) locations below.)

361, 681/SC 715

Class 382 (Class 715 title changed in See or Search Class (SC) locations below.)

382, Class Definition/References to Other Classes/SC 715

382, 229/SC 715

382, 231/SC 715

Class 400 (Class 715 title changed in See or Search Class (SC) locations below.)

400, 118.2/SC 715

Class 434 (Class 715 title changed in See or Search Class (SC) locations below.)

434, Class Definition/References to Other Classes/SC 715

Class 704 (Class 715 title changed in See or Search Class (SC) locations below.)

704, Class Definition/References to Other Classes/SC 715

704 8/SC 715

704, 10/SC 715

704, 270.1/SC 715

Class 707 (Class 715 title changed in See or Search Class (SC) location

707, Class Definition/References to Other Classes/SC 715

707, 1/SC 715

707, 2/SC 715

707, 3/SC 715

707, 4/SC 715

707, 5/SC 715

707, 6/SC 715

707, 8/SC 715

707, 101/SC 715

707, 102/SC 715

707, 103/SC 715

707, 200/SC 715

707, 201/SC 715

707, 203/SC 715

Class 709 (Class 715 title changed in See or Search Class (SC) locations below.)

709, Class Definition/References to Other Classes/SC 715

Class 711 (Class 715 title changed in See or Search Class (SC) locations below.)

711, 141/SC 715

Class 712 (Class 715 title changed in See or Search Class (SC) locations below.)

712, Class Definition/References to Other Classes/SC 715

Class 713 (Class 715 title changed in See or Search Class (SC) locations below.)

713, Class Definition/References to Other Classes/SC 715

Class 714 (Class 715 title changed in See or Search Class (SC) locations below.)

714, 19/SC 715

Class 717 (Class 715 title changed in See or Search Class (SC) locations below.)

717, Class Definition/References to Other Classes/SC 715

717, 100/SC 715

717, 103/SC 715

717, 110/SC 715

717, 114/SC 715

717, 120/SC 715

717, 122/SC 715

717, 123/SC 715

717, 146/SC 715

Class 718 (Class 715 title changed in See or Search Class (SC) locations below.)

718, Class Definition/References to Other Classes/SC 715

Class 719 (Class 715 title changed in See or Search Class (SC) locations below.)

719, Class Definition/References to Other Classes/SC 715

Class Definition: The class definition

<u>Delete</u> (entire sections):

SECTION I – CLASS DEFINITION

SECTION II - REFERENCES TO OTHER CLASSES

SECTION III - GLOSSARY

Insert:

SECTION I - CLASS DEFINITION

This class provides for data processing means or steps wherein a) human perceptible elements of electronic information (i.e., text or graphics) are gathered, associated, created, formatted, edited, prepared, or otherwise processed in forming a unified collection of such information storable as a distinct entity, b) a user's interaction with a computer system is used to control the presentation of display data; such interaction is interpreted and used by a data processor or computer architecture wherein system level elements of computation or data processing techniques are used prior to use with or in a specific display system, or c) a small program takes over a display screen if there are no keystrokes or mouse movements for a specified duration.

Class 715 is structured into 3 main divisions:

- (A) Presentation Processing of Document
- (B) Operator Interface Processing
- (C) Screen Saver Display Processing

SECTION II - REFERENCES TO OTHER CLASSES

SEE OR SEARCH CLASS:

- 235, Registers, appropriate subclasses for data bearing record controlled systems, basic machines and associated indicating mechanisms for ascertaining the number of movements of various devices and machines, plus machines made from these basic machines alone (e.g., cash registers, voting machines), and in combination with various perfecting features, such as printers and recording means.
- 345, Computer Graphics Processing and Selective Visual Display Systems, particularly subclasses 418-475 for computer graphics processing which may include operator interface processing detail; subclasses 156-184 for display peripheral interface input devices, and subclasses 1.1-111 for visual display systems with selective electrical control including display memory organization and structure for storing image

- data and manipulating image data between a display memory and display device.
- 358, Facsimile and Static Presentation Processing, appropriate subclasses for transmitting, processing, or reproducing a permanent picture or static presentation processing for a hard copy (e.g., printer) device.
- 379, Telephonic Communications, appropriate subclasses for two-way electrical communication of intelligible audio information of arbitrary content over a link including an electrical conductor.
- 381, Electrical Audio Signal Processing Systems and Devices, appropriate subclasses for wired one-way audio systems, per se.
- 382, Image Analysis, appropriate subclasses for operations performed on image data with the aim of measuring a characteristic of an image, detecting variations, detecting structures, or transforming the image data, and for procedures for analyzing and categorizing patterns present in image data.
- 600, Surgery, subclasses 300 through 595 for diagnostic testing applications of computers in the life sciences including patient monitoring and medical imaging.
- 700, Data Processing: Generic Control Systems or Specific Applications, subclasses 1 through 89 for data processing generic control systems; subclasses 90-306 for applications of computers in various environments.
- 702, Data Processing: Measuring, Calibrating, or Testing, appropriate subclasses for application of computers in measuring and testing.
- 703, Data Processing: Structural Design, Modeling, Simulation, and Emulation, subclasses 3 through 22 for data processing simulation.
- 704, Data Processing: Speech Signal Processing, Linguistics, Language Translation, and Audio Compression/Decompression, subclasses 1 through 10 for linguistics.
- 705, Data Processing: Financial, Business Practice, Management, or Cost/Price Determination, appropriate subclasses for business data processing.
- 706, Data Processing: Artificial Intelligence, appropriate subclasses for artificial intelligence in general.

- 707, Data Processing: Database and File Management or Data Structures, appropriate subclasses for database and file management or data structures.
- 708, Electrical Computers: Arithmetic Processing and Calculating, subclasses 1 through 9 for hybrid computers; subclasses 100-714 for calculators, digital signal processing and arithmetical processing, per se; subclasses 800-854 for electric analog computers.
- 711, Electrical Computers and Digital Processing Systems: Memory, subclasses 1 through 6 for addressing particular memory configurations and systems; subclasses 100-173 for memory accessing and control, per se; subclasses 200-221 for address formation processing.
- 717, Data Processing: Software Development, Installation, and Management, appropriate subclasses for a data processing software development tool.

SECTION III - GLOSSARY

ALPHANUMERIC

Any symbol found in the ASCII character/

COMPUTER

A machine that inputs data, processes data, stores data, and outputs data.

DATA

Representation of information in a coded manner suitable for communication, interpretation, or processing. See Address Data, Instruction Data, Status Data, and User Data in this Glossary.

DATA PROCESSING

See Processing, below.

DIGITAL DATA PROCESSING SYSTEM

An arrangement of processor(s) in combination with either memory or peripherals, or both, performing data processing.

DISPLAY CONTROLLER

An electrical circuit which actuates a display device in accordance with received image data.

DISPLAY DEVICE

A communication device which converts image data into a visual image.

DISPLAY ELEMENT

Means for producing a visual effect in a display device comprised of a plurality (e.g., matrix) of such means.

DISPLAY SYSTEM

A system which comprises one or more display terminals or one or more display devices.

DISPLAY TERMINAL

A unit which comprises at least one display device and user interface control means (e.g., mouse).

DOCUMENT

An entity of visually perceptible elements of electronic information (i.e., text or graphics).

FILE

A named collection of data.

IMAGE DATA

The information provided to form the visual image.

INFORMATION

Meaning that a human being assigns to data by means of the conventions applied to that data.

MEMORY

A functional unit to which data can be stored and from which data can be retrieved.

PERIPHERAL

A functional unit that transmits data to or receives data from a computer to which it is coupled.

PRESENTATION PROCESSING

Manipulating data for generating visually perceptible output.

PROCESSING

Methods or apparatus performing systematic operations upon data or information exemplified by functions such as data or information transferring, merging, sorting, and calculating (i.e., arithmetic operations or logical operations).

- (1) Note. In this class, the glossary term data is used to modify processing in the term data processing; whereas the term digital data processing system refers to a machine performing data processing.
- (2) Note. In an effort to avoid redundant constructions, in this class, where appropriate, the term address data processing is used in place of address data data processing.

PROCESSOR

A functional unit that interprets and executes instruction data.

TEXT

Data including alphanumeric characters representing words and symbols. Usually text characters are coded using a standard such as ASCII, which assigns numeric values to each character, number, or symbol.

USER DATA

Data other than address data, instruction data, or status data. (Also see Data)

VISUAL ELEMENT

The smallest constituent part of a composite visual image. A visual element may be the visual effect produced by a display element.

VISUAL IMAGE

The resultant image shown by the display device.

Subclass 500: The subclass title:

Delete:

MISCELLANEOUS:

Insert:

DOCUMENT PRESENTATION PROCESSING:

Delete: (the subclass definition)

This subclass is indented under the class definition. Subject matter not provided for in any of the above subclasses of this class.

Insert: (new subclass definition)

This subclass is indented under the class definition Subject matter wherein humanly perceptible elements of electronic information (i.e., text or graphics) are gathered, associated, created, formatted, edited, prepared, or otherwise processed in forming a unified collection of such information storable as a distinct entity.

Subclass 500.1: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein a presentation includes elements having more than one data type where the elements are presented in a predetermined order and timing relationship.

Insert:

This subclass is indented under subclass 500. Subject matter wherein a presentation includes elements having more than one data type where the elements are presented in a predetermined order and timing relationship.

Subclass 501.1: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein the textual information includes embedded links or format codes that direct process flow to alternate or additional displays.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the textual information includes embedded links or format codes that direct process flow to alternate or additional displays.

Delete:

The entire SEE OR SEARCH CLASS section

Insert:

SEE OR SEARCH THIS CLASS, SUBCLASS

854, for details of navigation within a structure when such interactivity is not within the context of document processing.

Subclass 502: The subclass definitiom:

Delete:

This subclass is indented under the class definition. Subject matter wherein the textual information may include a graphic presentation formatted as a drawing document, such as CAD and CAM designs.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the textual information may include a graphic presentation formatted as a drawing document, such as CAD and CAM designs.

D-69

Subclass 503: The subclass definitiom:

Delete:

This subclass is indented under the class definition. Subject matter wherein the textual information may include numerical information and is formatted into a ledgerlike worksheet.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the textual information may include numerical information and is formatted into a ledgerlike worksheet.

Subclass 505: The subclass definitiom:

Delete:

This subclass is indented under the class definition. Subject matter wherein the information is inserted at a designated geometric location within a document.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the information is inserted at a designated geometric location within a document

Subclass 507: Under the subclass definition:

Insert:

SEE OR SEARCH THIS CLASS, SUBCLASS

780, for on-screen workspace or object entry field (e.g., text entry field)

Subclass 509: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein the textual information may include numerical information and is formatted into a tabular format.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the textual information may include numerical information and is formatted into a tabular format.

Subclass 511: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein previous embodiments of documents are retained and organized through the use of various display attributes for the multiple embodiments.

Insert:

This subclass is indented under subclass 500. Subject matter wherein previous embodiments of documents are retained and organized through the use of various display attributes for the multiple embodiments.

Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

SEE OR SEARCH THIS CLASS, SUBCLASS

716-726, for operator interface aspects of groupware and cooperative data processing.

Subclass 512: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein an optional or selectable limited display of textual data related to data unconditionally displayed (e.g., memo field display related to text) is performed.

Insert:

This subclass is indented under subclass 500. Subject matter wherein an optional or selectable limited display of textual data related to data unconditionally displayed (e.g., memo field display related to text) is performed.

Subclass 513: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein the document is created and processed according to a standardized arrangement of interrelated hierarchical flow and page layout (e.g., office document architecture (ODA), content document architecture (CDA), standard generalized markup language (SGML), or hypertext markup language (HTML)).

Insert:

This subclass is indented under subclass 500. Subject matter wherein the document is created and processed according to a standardized arrangement of interrelated hierarchical flow and page layout (e.g., office document architecture (ODA), content document architecture (CDA), standard generalized markup language (SGML), or hypertext markup language (HTML)).

Insert:

SEE OR SEARCH THIS CLASS, SUBCLASS

760, for a markup language interface (e.g., HTML).

Subclass 514: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein the textual information may vary in scope of context and may contain or be contained by information of different scope.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the textual information may vary in scope of context and may contain or be contained by information of different scope.

Subclass 517: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein geometric positioning of elements within the document is altered or specified.

Insert:

This subclass is indented under subclass 500. Subject matter wherein geometric positioning of elements within the document is altered or specified

Subclass 526: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein the document is prepared for visual output.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the document is prepared for visual output.

Subclass 530: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter including means or steps for developing or changing a document wherein one or more elements of a document (i.e., text, graphics, control, or format codes) are added, deleted, or modified, or including means or steps for storing the resultant altered document or the alterations.

Insert:

This subclass is indented under subclass 500. Subject matter including means or steps for developing or changing a document wherein one or more elements of a document (i.e., text, graphics, control, or format codes) are added, deleted, or modified, or including means or steps for storing the resultant altered document or the alterations.

Subclass 542: The subclass definition:

Delete:

This subclass is indented under the class definition. Subject matter wherein the features of a character set for a specified collection of information are determined.

Insert:

This subclass is indented under subclass 500. Subject matter wherein the features of a character set for a specified collection of information are determined.

<u>DEFINITIONS ESTABLISHED</u> (Place established subclasses in numerical sequence.):

700 OPERATOR INTERFACE (E.G., GRAPHICAL USER INTERFACE):

This subclass is indented under the class definition. Subject matter wherein a user's interaction with a computer system is used to control the presentation of display data; such interaction is interpreted and used by a data processor or computer architecture wherein system level elements of computation or data processing techniques are used prior to use with or in a specific display system.

- (1) Note. Significantly claimed structure external to the user interface methods or apparatuses, claimed in combination with subject matter under this operator interface subclass, which displays or produces an image or sensory message related to such external structure or its function, is classified in the class appropriate to the external structure; however, nominally claimed structure external to this subclass, claimed in combination with subject matter under this subclass definition (e.g., creation or manipulation of icons, menus, windows, and user interactive functions, etc.), is classified in these subclasses unless provided for in the appropriate external subclass.
- (2) Note. Processing of interactive data for presentation with at most a nominal recitation of the input device (e.g., where the user's input is used to control the presentation of display data, etc.) is classified herein.
- (3) Note. Windowing techniques that can include interactive processes are classified herein.
- (4) Note. A graphical user interface in a television environment will be classified elsewhere, see the SEE OR SEARCH CLASS notes below.

SEE OR SEARCH CLASS:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 418-475, for a specific hardware for performing graphical data processing; subclasses 155-184, for details of a user input interface device with a specific display system, per se, both physical (e.g., mouse, joystick, keyboard, light pen, touch screen, etc.) and logical (e.g., cursor-pick, select-choice, etc.); subclass 521 for specific display systems that include display memory organization and structure for storing an image and manipulating image data between the display memory and the display system.
- 705, Data Processing: Financial, Business Practice, Management, or Cost/Price Determination, subclasses 1-45, for use of operator interface in electronic financial or business management systems, particularly subclasses 26-27 for electronic shopping systems utilizing operator interface.
- 725, Interactive Video Distribution Systems, subclasses 37-61, for a graphical user interface in a television environment.

701 Force feedback interaction:

This subclass is indented under subclass 700. Subject matter wherein a mechanical resistance is applied to the user in response to a user initiated event (i.e., resistance to movement of a mouse when a region of the display is traversed).

Tactile based interaction:

This subclass is indented under subclass 700. Subject matter wherein there is tactile as well as visual interaction between a user and an operator interface (i.e., vibration).

703 Cultural based (including language, time, monetary unit displayed):

This subclass is indented under subclass 700. Subject matter wherein the interface customization is based upon the ideas, activities, or ways of behaving that are special to a country, people, or region.

704 Playback of recorded user events (e.g., script or macro playback):

This subclass is indented under subclass 700. Subject matter wherein user interactions on the interface are stored and regenerated.

705 Help presentation:

This subclass is indented under subclass 700. Subject matter wherein a user can access assistance or information regarding an application or operation interactively.

706 Virtual character or avatar (e.g., animated person):

This subclass is indented under subclass 705. Subject matter wherein the assistance or information is given via a metaphorical graphical image.

707 Adaptive to user skill level:

This subclass is indented under subclass 705. Subject matter wherein the assistance or information provided is adjusted according to determined user proficiency

708 Context sensitive:

This subclass is indented under subclass 705. Subject matter wherein the assistance or information provided is determined by current conditions or a desired operation.

709 Coaching (e.g., animated example, or handholding or show me execution):

This subclass is indented under subclass 708. Subject matter wherein the user is shown a pattern to follow in order to achieve a desired result.

710 Input alert:

This subclass is indented under subclass 708. Subject matter wherein the current conditions pertain to warning or reminding a user about an input event.

711 Tool tip (e.g., cursor position based):

This subclass is indented under subclass 708. Subject matter wherein the condition is based on the graphical location of a user controlled tool.

712 Topic roadmap or index:

This subclass is indented under subclass 708. Subject matter wherein the on-line help provides either a detailed explanation or an ordered list of items that guide a user's progress towards a desired outcome.

713 Hierarchical:

This subclass is indented under subclass 712. Subject matter wherein the explanation or list is organized in a pyramidal manner in which each item is linked to items directly beneath it.

714 Combining diverse help information (e.g., different sources):

This subclass is indented under subclass 705. Subject matter wherein a user can simultaneously access assistance or information regarding plural diverse applications or operations interactively.

715 Balloon or bubble appearance:

This subclass is indented under subclass 705. Subject matter wherein the assistance or information is presented in a balloon or bubble format.

716 On screen video or audio system interface:

This subclass is indented under subclass 700. Subject matter wherein the interface is used for interacting with video or audio systems and applications.

717 Multiple diverse systems:

This subclass is indented under subclass 716. Subject matter wherein a user can simultaneously access plural diverse systems interactively.

718 Mode switching interface (e.g., switching between TV and computer):

This subclass is indented under subclass 717. Subject matter wherein a user can traverse between the plural diverse systems (i.e., switching between TV and computer).

719 Video interface:

This subclass is indented under subclass 716. Subject matter wherein the system or application deals specifically with video data.

720 Video traversal control:

This subclass is indented under subclass 719. Subject matter wherein the video data segments may be traversed interactively.

721 Indexed control:

This subclass is indented under subclass 719. Subject matter wherein the video program segments are indexed for accessibility (e.g., program guide, etc.).

722 Video parameter control:

This subclass is indented under subclass 719. Subject matter wherein the parameters of the video data are controlled interactively (e.g., brightness control, etc.).

723 For video segment editing or sequencing:

This subclass is indented under subclass 716. Subject matter wherein portions of video material are arranged into a different order than that in which it was originally arranged.

724 Cut and paste operation:

This subclass is indented under subclass 723. Subject matter wherein the arranging is performed by selecting material from one location, removing it to storage, and placing it in another.

725 Trimming:

This subclass is indented under subclass 723. Subject matter wherein the arranging causes a reduction to specific video material (i.e., deleting excess frames to save on memory space).

726 Effects or transitions interface:

This subclass is indented under subclass 723. Subject matter wherein the arranging causes video special effects and juxtapositions (e.g., scene meshing, etc.).

727 Audio user interface:

This subclass is indented under subclass 700. Subject matter wherein there is audio as well as visual interaction between a user and an operator interface.

727 Audio user interface:

This subclass is indented under subclass 700. Subject matter wherein there is audio as well as visual interaction between a user and an operator interface.

SEE OR SEARCH CLASS:

- 340, Communications: Electrical, subclass 692 for electrical audible alarms, and subclasses 384.1-404.3 for electrical audible indication.
- 381, Electrical Audio Signal Processing Systems and Devices, appropriate subclasses, for audio signal processing in general.
- 704, Data Processing: Speech Signal Processing, Linguistics, Language Translation, and Audio Compression/Decompression, subclasses 200-278, for speech signal processing.

728 Audio input for on-screen manipulation (e.g., voice controlled GUI):

This subclass is indented under subclass 727. Subject matter wherein audio input is used to interact with the interface (e.g., voice controlled GUI, etc.).

729 For a visually challenged user:

This subclass is indented under subclass 727. Subject matter designed to help a user who has impaired eyesight.

730 Presentation to audience interface (e.g., slide show):

This subclass is indented under subclass 700. Subject matter wherein the interface is used interactively to convey data to an audience.

731 Authoring tool:

This subclass is indented under subclass 730. Subject matter wherein a user creates a presentation interactively.

732 Slide manipulating or editing:

This subclass is indented under subclass 730. Subject matter wherein the data is presented on slides (e.g., slide show, etc.).

733 For plural users or sites (e.g., network):

This subclass is indented under subclass 700. Subject matter wherein concurrently established related or collaborative interfaces are provided to multiple displays.

SEE OR SEARCH CLASS:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 1.1-3.4 for plural displays.
- 709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring, subclasses 200-253, for details of the transfer of data among a plurality of computers or digital data processing systems.

734 Interactive network representation of devices (e.g., topology of workstations):

This subclass is indented under subclass 733. Subject matter wherein an interface permits a user to perceive or control the distribution or operation of the components making up an arrangement of interconnected systems.

735 Configuration:

This subclass is indented under subclass 734. Subject matter wherein the interface permits the user to observe, control, or modify the layout or specific function of the individual components.

SEE OR SEARCH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring, subclasses 220-222, for details of the configuration of computer networks.

736 Network managing or monitoring status:

This subclass is indented under subclass 734. Subject matter wherein the interface permits the user to conduct administrative operations or perform observations of the current state of the components.

SEE OR SEARCH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring, subclasses 223-226, for details of the management of computer networks.

737 User navigation between devices:

This subclass is indented under subclass 734. Subject matter wherein a user s central point of focus in the interface may traverse from one network node to another.

SEE OR SEARCH CLASS THIS CLASS, SUBCLASS:

854-855, for navigation throughout a hierarchy or network-structured interface.

738 Network resource browsing or navigating:

This subclass is indented under subclass 733. Subject matter wherein a user has interactive access to distributed information or functions made available through a certain given user site.

SEE OR SEARCH THIS CLASS, SUBCLASS:

501.1, for hypermedia document processing.

739 Selecting from a resource list (e.g., address book):

This subclass is indented under subclass 738. Subject matter wherein the items of information are organized into a group from which the user makes a choice.

740 Remote operation of computing device:

This subclass is indented under subclass 733. Subject matter wherein a user has access to and control of a data processing system or component at a location removed from the user.

741 Access control or permission:

This subclass is indented under subclass 733. Subject matter wherein a user must have permission before gaining control of a graphical user interface.

(1) Note. Permission is usually granted by correctly entering a password.

SEE OR SEARCH CLASS:

713, Electrical Computers and Digital Processing Systems: Support, subclasses 200-202 for computer security methods or devices.

742 Interactive portal (e.g., secure point of access):

This subclass is indented under subclass 741. Subject matter wherein a network location acts to coordinate availability, retrieval, or execution of resources associated with that location.

743 Access rights to interactive controls:

This subclass is indented under subclass 741. Subject matter wherein the user interface is capable of establishing, modifying, or observing the function of processes enabled by one or more of the plural sites.

744 Interface customization or adaption (e.g., client server):

This subclass is indented under subclass 733. Subject matter wherein an interactive user environment is specifically established or modified to suit the needs of the user at a given site.

745 Based on stored usage or user profile (e.g., frequency of use, cookie):

This subclass is indented under subclass 744. Subject matter wherein the user environment is established using memory contents developed during previous user interactions.

746 Interface conversion:

This subclass is indented under subclass 744. Subject matter wherein the user environment is transformed to a different environment affording similar or analogous function through a new presentation mode.

747 End user based (e.g., preference setting):

This subclass is indented under subclass 744. Subject matter wherein the operator has direct access to and control of the particulars of the interactive environment.

748 User interactive multicomputer data transfer (e.g., file transfer:

This subclass is indented under subclass 700. Subject matter wherein information is accessed at one site and made available at a second site.

SEE OR SEARCH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring or Plural Processor Synchronization, subclasses 217-219, for details of accessing data across a computer network.

749 Downloading remote executable (e.g., JAVA CGI):

This subclass is indented under subclass 748. Subject matter wherein the information enables a function or functions not initially held at the second site.

(1) Note. The executables are usually program modules or scripts designed to run on either the platform of the first (i.e., server) side or second (i.e., client) side.

SEE OR SERACH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring: subclasses 201-203 for details of processes distributed among a number of networked systems.

750 Multiple users on a single workstation:

This subclass is indented under subclass 700. Subject matter wherein a plurality of operators are given access to or control of the functions or data maintained in one computer system.

751 Computer supported collaborative work between plural users:

This subclass is indented under subclass 700. Subject matter wherein users at the multiple displays join in completing a given task as a group.

SEE OR SEARCH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring, subclasses 201-203, for data processing that is distributed across a computer network.

752 Interactive email:

This subclass is indented under subclass 751. Subject matter wherein specifically addressed messages are created and transmitted between sites.

SEE OR SEARCH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring, appropriate subclasses for email systems, per se.

753 Computer conferencing:

This subclass is indented under subclass 751. Subject matter wherein data from participants at the display sites is distributed to other participants at other collaborative sites.

SEE OR SEARCH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring, subclasses 204-207, for email systems, per se.

754 Multicursor (e.g., multiple on-screen pointers):

This subclass is indented under subclass 753. Subject matter wherein a plurality of representations corresponding to individual user pointing device inputs are represented at a single site.

755 Floor control:

This subclass is indented under subclass 753. Subject matter wherein a plurality of representations corresponding to individual user pointing device inputs are represented at a single site. Subject matter having the ability to moderate meetings and prevent everyone from talking at once by controlling "who has the floor."

756 Real Time Video:

This subclass is indented under subclass 753. Subject matter wherein the distributed data includes moving images that are immediately displayed.

SEE OR SEARCH THIS CLASS, SUBCLASS:

716-726, for details of operator interfaces involving video.

757 Virtual 3D environment:

This subclass is indented under subclass 753. Subject matter wherein an artificial workspace is created and presented to user in such a way that it appears like a real volumetric spatial region.

SEE OR SEARCH THIS CLASS, SUBCLASS:

849-852, for details of operator interfaces involving video for details of operator interfaces represented by a three-dimensional space.

758 Chat room:

This subclass is indented under subclass 753. Subject matter wherein the distributed data comprises a series of messages submitted and made available to other participants.

759 Group window:

This subclass is indented under subclass 751. Subject matter wherein a display representing the group's work appears at the sites in a constrained screen region.

760 Mark up language interface (e.g., HTML):

This subclass is indented under subclass 700. Subject matter wherein a document-based protocol is used to implement the components of an interactive environment.

SEE OR SEARCH THIS CLASS, SUBCLASS

513, for detail of structured documents such as HTML.

761 Plural adjacent interactive display devices:

This subclass is indented under subclass 700. Subject matter wherein the display data is presented in two or more display devices.

.

762 User interface development (e.g., GUI builder):

This subclass is indented under subclass 700. Subject matter wherein a user is able to author, create, or manage the user interface.

SEE OR SEARCH CLASS:

717, Data Processing: Software Development, Installation, and Management, subclasses 100-167, for details of software programming development tools.

763 Graphical or iconic based (e.g., visual program):

This subclass is indented under the subclass 762. Subject matter wherein a graphical shape or picture to be selected and manipulated by a user is created directly on a display part of a monitor.

764 On-screen workspace or object:

This subclass is indented under the subclass 700. Subject matter providing a specific element in an interface with which a user can interact.

765 Customizing multiple diverse workspace objects:

This subclass is indented under the subclass 764. Subject matter wherein distinct interface elements, such as icons, buttons, or menus, may be manipulated.

766 Z order of multiple diverse workspace objects:

This subclass is indented under the subclass 764. Subject matter wherein the priority or overlap of distinct elements may be altered.

Focus control of multiple diverse workspace objects:

This subclass is indented under the subclass 764. Subject matter wherein the element that is made the active component may be altered.

768 Translucency or transparency interface element (e.g., invisible control):

This subclass is indented under the subclass 764. Subject matter wherein the relative transparency of an interface element may be modified.

769 Data transfer operation between objects (e.g., drag and drop):

This subclass is indented under the subclass 764. Subject matter wherein data is moved from one location on the screen to another by dragging elements on the screen.

SEE OR SEARCH CLASS:

719, Electrical Computers and Digital Processing System: Interprogram Communication or Interprocess Communication (IPC), appropriate subclasses for details of interprogram and interprocess communication.

770 Cut and paste:

This subclass is indented under the subclass 769. Subject matter wherein data to be moved is selected, removed to storage, and then placed at a different location.

771 Instrumentation and component modeling (e.g., interactive control panel, virtual device):

This subclass is indented under the subclass 764. Subject matter wherein graphical representations of systems elements are used to display variable information relating to operating state or acquired parameter values.

772 Progress or activity indicator:

This subclass is indented under the subclass 771. Subject matter wherein the interface element indicates the status or progress of a task being processed.

773 Virtual input device (e.g., virtual keyboard):

This subclass is indented under subclass 771. Subject matter wherein a user can enter information from an on-screen representation of an input device.

774 Ticker metaphor:

This subclass is indented under subclass 764. Subject matter wherein the interface element resembles a scrolled region that dynamically displays information in real time.

775 Office layout metaphor (e.g., filing cabinet, desk):

This subclass is indented under subclass 764. Subject matter wherein the metaphoric object or objects suggest a business environment, enabling access to various items commonly found in a real-world workspace.

776 Indexed book or notebook metaphor:

This subclass is indented under subclass 764. Subject matter wherein the metaphoric object suggests a multi-page text-or document-based item, and wherein user interaction with an associated sub-element causes a corresponding page to be displayed or selected.

SEE OR SEARCH CLASS

345, Computer Graphics Processing and Selective Visual Display Systems, subclass 473 for details of the animation procedure used to indicate progression to various book pages.

777 Tab metaphor (e.g., property sheet):

This subclass is indented under subclass 764. Subject matter wherein the on-screen object simulates a short projecting extension of a larger region.

778 Multiple virtual screen or desktop switching:

This subclass is indented under subclass 764. Subject matter wherein the display includes plural configurations of a desktop configuration.

779 Task bar or desktop control panel:

This subclass is indented under subclass 764. Subject matter wherein the interface element is an arrangement of graphic indicia that is used to select one of a number of application processes.

780 Entry field (e.g., text entry field):

This subclass is indented under subclass 764. Subject matter wherein information is entered at a particular location.

SEE OR SEARCH THIS CLASS, SUBCLASS:

507-508, for details of textual form filling.

781 Window or viewpoint:

This subclass is indented under subclass 764. Subject matter wherein all interactions are constrained to one or more portions or regions of the display, which may display all or part of their related information.

3D Perspective view of window layout:

This subclass is indented under subclass 781. Subject matter wherein the windows are displayed so as to simulate a volumetric spatial arrangement.

SEE OR SEARCH THIS CLASS, SUBCLASS:

848-852, for details of operator interfaces represented by three-dimensional space.

SEE OR SEARCH CLASS

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 419-427 for details of three-dimensional graphics processing.

783 On-screen window list or index:

This subclass is indented under subclass 781. Subject matter wherein the interface element is a list of windows from which the user may select.

784 Window scrolling:

This subclass is indented under subclass 781. Subject matter wherein, when a window displays only part of its related information, the user can selectively control which portion is displayed.

785 Autoscroll:

This subclass is indented under subclass 784. Subject matter wherein the determination of whether to scroll is based upon factors other than user input.

786 Scroll tool (e.g., scroll bar):

This subclass is indented under subclass 784. Subject matter wherein there is displayed an object which, when manipulated by a user, causes a display to show consecutive lines of data

787 With content attribute on scroll tool:

This subclass is indented under subclass 786. Subject matter wherein the object displays a value related to a characteristic.

788 Layout modification (e.g., move or resize):

This subclass is indented under subclass 781. Subject matter wherein the placement, location, or size of windows relative to the display may be modified.

789 Based on usage or user profile (e.g., frequency of use):

This subclass is indented under subclass 788. Subject matter wherein the layout modification is based upon significant features of how an individual has used the interface.

790 Overlap control:

This subclass is indented under subclass 788. Subject matter wherein the placement of displayed windows relative to each other is such that one window may extend over or past and cover a part of another window.

791 Always on top:

This subclass is indented under subclass 790. Subject matter wherein one window is, at all times, displayed as if it were placed so as to cover a portion of another window.

(1) Note. "A portion" as used herein includes all and none as well as any portion in between.

792 Tiling or split pane:

This subclass is indented under subclass 790. Subject matter wherein windows are displayed as if arranged so that no portion of one window overlaps a portion of another window.

793 Cascading:

This subclass is indented under subclass 790. Subject matter wherein windows are displayed in an arrangement such that they overlap one another.

794 Priority or overlap change (e.g., z-order):

This subclass is indented under subclass 790. Subject matter wherein priority is used to determine which window of a plurality is in the foreground when windows overlap.

795 Minimizing or send to bottom:

This subclass is indented under subclass 794. Subject matter wherein the window is hidden, or the priority of the window is modified so that the window appears in the background behind all other windows.

796 Bring to top:

This subclass is indented under subclass 794. Subject matter wherein the window is restored to its previous size and the priority of the window is modified so that the window appears in the foreground above all other windows.

797 Viewing lower priority window (e.g., overlapped windows):

This subclass is indented under subclass 790. Subject matter wherein the priority attributes are changed when the user needs to operate within a lower priority window.

798 Combining moving and resizing operations (e.g., moving causes resizing):

This subclass is indented under subclass 788. Subject matter wherein a window's place or position relative to the display and size relative to the display may both be modified.

799 Moving (e.g., translating):

This subclass is indented under subclass 788. Subject matter wherein a window's place or position relative to the display may be modified.

800 Resizing (e.g., scaling):

This subclass is indented under subclass 788. Subject matter wherein a window's size relative to the display may be modified.

801 Contained object scale change:

This subclass is indented under subclass 800. Subject matter wherein an interface element within the window is sized relative to the window.

802 Focus control:

This subclass is indented under subclass 781. Subject matter wherein the active window may be altered.

.

Window differentiation:

This subclass is indented under subclass 781. Subject matter wherein windows have attributes that distinguish them from other windows.

804 Interwindow link or communication:

This subclass is indented under subclass 781. Subject matter wherein windows have established relationships to other windows, allowing communication between windows, grouping of related windows into sets, or allowing operations to be applied in common to groups of windows.

SEE OR SEARCH CLASS:

719, Electrical Computers and Digital Processing System: Interprogram Communication or Interprocess Communication (IPC), subclass 329 for details of data transfer between two windowed programs.

805 On-screen link or communication (e.g., cue):

This subclass is indented under subclass 804. Subject matter wherein an interface element provides visual feedback of the link or communication between windows.

806 Window memory structure:

This subclass is indented under subclass 781. Subject matter wherein a storage system is used for storing window data for display.

807 Stored priority attribute:

This subclass is indented under subclass 806. Subject matter wherein the priority attribute that issued to determine which window of a plurality is in the fore ground when windows overlap is copied into a memory device.

808 Pop-up control:

This subclass is indented under subclass 764. Subject matter wherein an interface element not previously displayed appears on the screen in response to user interaction or when user interaction is required.

809 Dialog box:

This subclass is indented under subclass 764. Subject matter wherein there is displayed an enclosed, immovable, area, resembling a window, on the screen that requests some type of information from a user.

810 Menu or selectable iconic array (e.g., palette):

This subclass is indented under subclass 764. Subject matter wherein the interface element is a list of items from which the user may choose.

Based on usage or user profile (e.g., frequency of use):

This subclass is indented under subclass 810. Subject matter wherein which particular item is displayed depends upon a past history of user selections.

812 Preselection (e.g., best guess before mouse click):

This subclass is indented under subclass 811. Subject matter wherein the interface element is a predicted list of likely items from which the user may choose.

813 Default selection item:

This subclass is indented under subclass 811. Subject matter wherein an item is presented for user selection by default.

814 Limited time selection opportunity:

This subclass is indented under subclass 810. Subject matter wherein the items listed depend upon a history over a given interval of time.

815 Sizing modification (e.g., scaling):

This subclass is indented under subclass 810. Subject matter wherein the dimensions of the list of items is modified.

816 Partial input lookup (e.g., partial string lookup):

This subclass is indented under subclass 810. Subject matter wherein a complete item is presented based upon a partial input.

817 Context location indication (e.g., previous or next menu item indication):

This subclass is indented under subclass 810. Subject matter wherein indications are provided for navigating among the items.

818 Simultaneous next and previous indication (e.g., menu road map):

This subclass is indented under subclass 817. Subject matter wherein the indications include next and previous items.

819 Next menu indication:

This subclass is indented under subclass 817. Subject matter wherein the indications include next item indication.

820 Previous menu indication:

This subclass is indented under subclass 817. Subject matter wherein the indications include previous item indication.

821 Emphasis:

This subclass is indented under subclass 810. Subject matter wherein the particular menu displayed is dependent on what a user is doing at a particular moment.

822 Preselection emphasis:

This subclass is indented under subclass 821. Subject matter including a visual indication of a selectable item in focus, e.g., highlighting, etc.

823 Selection or confirmation emphasis:

This subclass is indented under subclass 821. Subject matter wherein a particular visual intensity is given to that part of the menu that has been selected.

824 Unavailable emphasis:

This subclass is indented under subclass 821. Subject matter wherein visual attention is given to items that are not selectable.

825 Dynamically generated menu items:

This subclass is indented under subclass 810. Subject matter wherein the list of menu items is developed during the course of user interaction.

826 Add on item (e.g., software developed, customized):

This subclass is indented under subclass 810. Subject matter wherein an item is appended to the interface.

Mnemonic (e.g., accelerator key):

This subclass is indented under subclass 810. Subject matter wherein instructions are assigned to abbreviated inputs.

Partial menu display (e.g., one menu item at a time):

This subclass is indented under subclass 810. Subject matter wherein the list of items is partially displayed in response to user interaction.

Advancing to next menu item in the same menu:

This subclass is indented under subclass 828. Subject matter wherein selection emphasis is moved to a next menu item in the list.

830 Scrolling (e.g., spin dial):

This subclass is indented under subclass 829. Subject matter wherein the list of items is moved to a particular portion.

With specific input device:

This subclass is indented under subclass 828. Subject matter configured for a particular input device.

832 Analog selection style:

This subclass is indented under subclass 810. Subject matter wherein selection takes place over a continuously variable range (e.g., dial, etc.).

833 Slider control:

This subclass is indented under subclass 810. Subject matter wherein a graphical control appears to move smoothly along a surface.

Radial based (e.g., radial or pie menu):

This subclass is indented under subclass 810. Subject matter wherein each item is displayed in the form of a sector of a circle.

835 Selectable iconic array:

This subclass is indented under subclass 810. Subject matter wherein an interface element is a graphical representation of a function or system resource that is accessed when the graphical representation is selected by user interaction.

836 3D icons:

This subclass is indented under subclass 835. Subject matter wherein displayed icons have a three-dimensional appearance.

837 Compound or aggregate icon:

This subclass is indented under subclass 835. Subject matter wherein icons are a collection of smaller units.

838 Thumbnail or scaled image:

This subclass is indented under subclass 835. Subject matter wherein the icons are reduced scale images.

839 Imitating real life object:

This subclass is indented under subclass 835. Subject matter wherein an icon graphically suggests a real-world item that performs a function analogous to a function invoked by selection of the icon.

840 Using button array:

This subclass is indented under subclass 810. Subject matter wherein the menu is composed of an arrangement of symbolic graphical selection indicia (e.g., pick region, etc.).

841 Sub-menu structure:

This subclass is indented under subclass 810. Subject matter wherein the user may traverse a number of related and linked menu lists, based upon successive choices.

842 Tear off:

This subclass is indented under subclass 841. Subject matter wherein a sub-menu can be moved around the screen.

843 Pull down:

This subclass is indented under subclass 841. Subject matter wherein a sub-menu appears directly beneath a selected item

844 Timed:

This subclass is indented under subclass 810. Subject matter wherein the displaying of the menu items is influenced by time.

845 Multiple selections in a single menu:

This subclass is indented under subclass 810. Subject matter wherein a plurality of menu items can be simultaneously selected.

846 Non-array icons:

This subclass is indented under subclass 764. Subject matter wherein the icons are not linked to each other.

847 Shortcut:

This subclass is indented under subclass 846. Subject matter wherein the interface element is a graphical representation that provides an immediate access to a file or function.

848 Interface represented by 3D space:

This subclass is indented under subclass 764. Subject matter providing a simulation of the workspace in volumetric space.

SEE OR SEARCH CLASS:

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 419-427 for details of particular three-dimensional graphics manipulation, rendering, or presentation techniques used to generate the interface.

849 Individual object:

This subclass is indented under subclass 848. Subject matter wherein graphical elements having three-dimensional attributes are used.

850 Navigation within 3D space:

This subclass is indented under subclass 848. Subject matter including traversing in the 3D workspace.

851 On-screen navigation control:

This subclass is indented under subclass 850. Subject matter including on-screen controls for traversing the 3D workspace.

852 Picking 3D object:

This subclass is indented under subclass 848. Subject matter wherein a user selects an object that is graphically represented in three dimensions.

853 Hierarchy or network structure:

This subclass is indented under subclass 764. Subject matter wherein interface elements are organized into a tree structure type or a linked node grouping.

854 Navigation within structure:

This subclass is indented under subclass 853. Subject matter wherein the user can navigate through the interface by following the links from one node to another.

855 On-screen roadmap or index:

This subclass is indented under subclass 854. Subject matter wherein there is provided either a detailed explanation or an ordered list of items that guide a user's progress towards a desired outcome.

856 Cursor:

This subclass is indented under subclass 764. Subject matter wherein there is an on screen object that moves as a mouse is moved, and where commands and options are selected by positioning a portion of cursor or pointer over the desired choice and clicking a mouse button.

857 Pointer direction adjustment:

This subclass is indented under subclass 856. Subject matter wherein the orientation of the pointer or cursor is changed interactively.

858 Automatic position adjustment:

This subclass is indented under subclass 856. Subject matter wherein the position of the pointer or cursor is corrected automatically (i.e., after an interface is changed in some fashion).

859 Status indicator:

This subclass is indented under subclass 856. Subject matter wherein an object that has a cursor or pointer over it is graphically modified.

860 Selection emphasis:

This subclass is indented under subclass 859. Subject matter wherein the modification is highlighting.

By Dynamically changed appearance (e.g., animated or live action):

This subclass is indented under subclass 859. Subject matter wherein a simulation of movement of a pointer is created by displaying a series of pictures, or frames (i.e., animated or live action).

(1) Note. The difference between animation and video is that video takes continuous motion and breaks it up into discrete frames, animation starts with independent pictures and puts them together to form the illusion of continuous motion.

862 Proximity detection:

This subclass is indented under subclass 856. Subject matter wherein, for selection of an on-screen object, a portion of the cursor or pointer is placed anywhere in a region close to the selected object.

863 Gesture-based:

This subclass is indented under subclass 700. Subject matter wherein a path or shape described by user input is indicative of a desired operation.

SEE OR SEARCH CLASS:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 156-184 for the details of user input devices used to accomplish such input.
- Image Analysis, appropriate subclasses for details of the detection of the identity of a desired operation on the basis of an image defined by the path or shape.

For a small display screen (e.g., personal digital assistant, palm-top):

This subclass is indented under subclass 700. Subject matter wherein the interface is used on a portable system.

Miscellaneous interface for the handicapped or disabled user:

This subclass is indented under subclass 700. Subject matter designed to help physically or mentally impaired users.

SEE OR SEARCH THIS CLASS, SUBCLASS:

729, for audio user interfaces designed for visually impaired users.

866 Miscellaneous customization or adaptation:

This subclass is indented under subclass 700. Subject matter wherein an aspect of the operator interface is modified or established.

867 SCREEN SAVER DISPLAY:

This subclass is indented under the class definition. Subject matter wherein a small program takes over the display screen if there are no keystrokes or mouse movements for a specified duration.

CROSS-REFERENCE ART COLLECTIONS

961 OPERATOR INTERFACE WITH VISUAL STRUCTURE OR FUNCTION DICTATED BY INTENDED USE:

This cross-reference art is indented under the class definition. Collection of art wherein a user interactive arrangement is designed around and specific to a given task.

(1) Note. This cross-reference art collection is intended to include subject matter relating to more than nominal details of operator interfaces which are characteristic of the given task. It is not intended to include subject matter directed to details of the task itself.

SEE OR SEARCH THIS CLASS, SUBCLASS:

700-867, for specific details of the visual structure of an operator interface.

962 Operator interface for marketing or sales:

This cross-reference art is indented under subclass 961. Collection of art wherein the given task is a commercial function involving user response.

SEE OR SEARCH CLASS:

705, Data Processing: Financial, Business Practice, Management, or Cost/Price Determination, appropriate subclasses when the recitation of user interface is nominal and secondary to the commercial function itself, as may appear in an automated financial, business practice, or management system.

963 Calendar or scheduling:

This cross-reference art is indented under subclass 961. Collection of art wherein the given task is designating the time or date of one or more events.

SEE OR SEARCH CLASS:

705, Data Processing: Financial, Business Practice, Management, or Cost/Price Determination, subclasses 8-9 for automated scheduling related to operations research in a business environment.

964 CAD or CAM (e.g., interactive design tool):

This cross-reference art is indented under subclass 961. Collection of art wherein the given task is a part of computer aided design or computer aided manufacturing.

SEE OR SEARCH CLASS:

- .345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 419-427 for specific three-dimensional object processing used with such an interface and subclass 619 for specific three-dimensional object processing used with such an interface.
- 700, Data Processing: Generic Control Systems or Specific Applications, subclasses 95-212, for use of operator interface in CAD or CAM product manufacturing.

965 For process control and configuration:

This cross-reference art is indented under subclass 961. Collection of art wherein the given task is specifying or modeling system functions or connections.

(1) Note. This cross-reference art collection is intended to include operator interface having only nominal details of the structure of associated system components.

SEE OR SEARCH CLASS:

700, Data Processing: Generic Control Systems or Specific Applications, subclasses 83-85, for the particular details of control systems including a device or apparatus controlled thereby in which an opera control interface is used to com with the control system.

966 Computer process (e.g., operation of computer):

This cross-reference art is indented under subclass 965. Collection of art wherein the system is a data processing system.

(1) Note. Examples of such an operator interface are those in which a data processing system is controlled or configured in a supervisory manner. This cross-reference art collection is not intended to include operator interfaces whose display content is determined by an arbitrary function of the data processing system.

SEE OR SEARCH CLASS:

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 700-867, for general use of operator interfaces for display.

967 Visual or iconic programming:

This cross-reference art is indented under subclass 966. Collection of art wherein the functions or connections are graphically and symbolically designated, represented, and edited.

(1) Note. This cross-reference art collection is intended to include subject matter directly relating to operator interface details involved in the manipulation of computer system functions or connections.

968 Interface for database querying and retrieval:

This cross-reference art is indented under subclass 966. Collection of art wherein the function of the data processing system is accessing stored information on the basis of user specification.

SEE OR SEARCH CLASS:

707, Data Processing: Database and File Management or Data Structures, appropriate subclasses, for details of database accessing methods.

969 Network layout and operation interface:

This cross-reference art is indented under subclass 965. Collection of art wherein connections are designated which establish associative links between a plurality of system components or nodes.

SEE OR SEARCH CLASS:

709, Electrical Computers and Digital Processing Systems: Multicomputer Data Transferring, appropriate subclasses for means or steps for detecting or observing characteristics or conditions of the network.

970 Instrumentation and component modelling (e.g., interactive control panel):

This cross-reference art is indented under subclass 965. Collection of art wherein graphical representations of system elements are used to display variable information relating to operating state or acquired parameter values.

970.1 Amusement or marital aid interface:

This cross-reference art is indented under subclass 961. Collection of art wherein the given task is the operation of an amusement device or relating to the state of marriage.

971 COOPERATIVE DECISION SUPPORT SYSTEM FOR GROUP OF USERS:

This cross-reference art is indented under the class definition. Collection of art wherein a group of users at plural display interface sites join in the collaborative effort required to effect a single desired choice related to a common task.

972 INSERTED REAL-TIME VIDEO IN OPERATOR INTERFACE:

This cross-reference art is indented under the class definition. Collection of art wherein a computer graphics display is capable of supporting, within its interactive screen region, the depiction of a live-action sequence or a captured still image from such a sequence.

973 SCROLL TOOL (E.G., WINDOW SCROLL BAR):

This cross-reference art is indented under the class definition. Collection of art wherein operator interface display elements may be used to select a portion to be displayed in a constrained region by interaction with on-screen tools which graphically represent the location of the selected portion.

SEE OR SEARCH CLASS:

Computer Graphics Processing and Selective Visual Display Systems, subclass 684, display control scrolling in general.

974 SLIDER CONTROL AS ON-SCREEN OBJECT IN OPERATOR INTERFACE:

This cross-reference art is indented under the class definition. Collection of art wherein an interactive user controls the setting of a value or condition within a computer system by the motion of one sub-portion of an interface element with respect to others.

975 POP-UP DIALOG BOX FOR ENTRY:

This cross-reference art is indented under the class definition. Collection of art wherein a display region appears for an interactive user where it had not been previously for the purpose of obtaining input or information indications from the user.

SEE OR SEARCH THIS CLASS, SUBCLASS:

808, for pop-up control in general.

809, for a dialog box in general.

976 3-D ICON:

This cross-reference art is indented under the class definition. Collection of art wherein a symbolic representation of a function or system resource in an interactive user display appears with a perspective appearance.

SEE OR SEARCH THIS CLASS, SUBCLASS:

836, for a selectable array of 3D icons.

846-847, for non-array icons.

SEE OR SEARCH CLASS:

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 419-427, for computer graphics methods or apparatus for generating the perspective display.

977 DYNAMIC ICON (E.G., ANIMATED OR LIVE ACTION):

This cross-reference art is indented under the class definition. Collection of art wherein a symbolic representation of a function or system resource in an interactive user display appears with an attribute of real-time motion within the display screen space.

SEE OR SEARCH CLASS:

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 473-475 for details of animation processing used to create the attribute of real-time motion.

978 AUDIO INTERACTION AS PART OF AN OPERATOR INTERFACE:

This cross-reference art is indented under the class definition. Collection of art wherein sounds are used as input to or output from an operator interface.

(1) Note. This collection is intended to include interface arrangements which, in addition to graphical features, provide the user with auditory control or feedback to enhance the graphical effect.

SEE OR SEARCH CLASS:

704, Data Processing: Speech Signal Processing, Linguistics, Language Translation, and Audio Compression/Decompression, subclasses 200-278, for speech signal processing.

FOREIGN ART COLLECTIONS

The definitions below correspond to abolished subclasses from which these collections were formed. See the Foreign Art Collection schedule of this Class for specific correspondences. [Note: the titles and definitions for indented art collections include all the details of the one(s) that are hierarchically superior.]

FOR 176 OPERATOR INTERFACE (345/326):

This foreign art collection is indented under the class definition. Foreign art collection including subject matter wherein a user's interaction with a computer system is used to control the presentation of display data. Such interaction is interpreted and used by a data processor or computer architecture wherein system level elements of computation or data processing techniques are used prior to use with or in a specific display system.

- (1) Note. Significantly claimed structure external to the user interface methods or apparatuses, claimed in combination with subject matter under this operator interface subclass, which displays or produces an image or sensory message related to such external structure or its function, is classified in the class appropriate to the external structure; however, nominally claimed structure external to this subclass, claimed in combination with subject matter under this subclass definition (i.e., creation or manipulation of icons, menus, windows, and user interactive functions), is classified in these subclasses unless provided for in the appropriate external subclass.
- (2) Note. Processing of interactive data for presentation with at most a nominal recitation of the input device (i.e., where the user's input is used to control the presentation of display data) is classified herein.
- (3) Note. Windowing techniques which can include interactive processes are classified herein.

FOR 177 Interaction in a television environment (345/327):

This foreign art collection is indented under subclass FOR 176. Foreign art collection including subject matter wherein the user is given control over operations involving broad, real-time, or live-action video signals.

FOR 178, For video segment editing or sequencing (345/328):

This foreign art collection is indented under subclass FOR 177. Foreign art collections including subject matter wherein the operations include arranging portions of acquired video material into a different order than that in which it was originally obtained.

FOR 179 For plural users or sites (345/329):

This foreign art collection is indented under subclass FOR 176. Foreign art collections including subject matter wherein concurrently established related or collaborative interfaces are provided to multiple displays.

FOR 180 Computer conferencing (345/330):

This foreign art collection is indented under subclass FOR 179. Foreign art collections including subject matter wherein data from participants at the display sites is distributed to other participants at other collaborative sites.

FOR 181 Computer supported cooperative work (345/331):

This foreign art collection is indented under subclass FOR 179. Foreign art collections including subject matter wherein users at the multiple displays join in completing a given task as a group.

FOR 182 Group window (345/332):

This foreign art collection is indented under subclass FOR 181. Foreign art collections including subject matter wherein a display representing the group's work appears at the sites in a constrained screen region.

FOR 183 Interface customization or edition (345/333):

This foreign art collection is indented under subclass FOR 176. Foreign art collection including subject matter wherein an aspect of the operator interface is modified or established.

FOR 184 Graphical appearance (345/334):

This foreign art collection is indented under subclass FOR 183. Foreign art collections including subject matter wherein a visual attribute of an element in the operator interface is modified.

FOR 185 Link between object and task or function (e.g., client/server) (345/335):

This foreign art collection is indented under subclass FOR 183. Foreign art collections including subject matter wherein the aspect is a relationship between interface feature and routine performed.

FOR 186 Having on-line help (345/336):

This foreign art collection is indented under subclass FOR 176. Foreign art collections including subject matter wherein a user can access assistance or information regarding an application or operation interactively

FOR 187 Adaptive to user skill level (345/337):

This foreign art collection is indented under subclass FOR 186. Foreign art collections including subject matter wherein the assistance or information provided is adjusted according to a determined user proficiency.

FOR 188 Context sensitive (345/338):

This foreign art collection is indented under subclass FOR 186. Foreign art collections including subject matter wherein the assistance or information provided is determined by current conditions or a desired operation.

FOR 189 On-screen workspace or object (345/339):

This foreign art collection is indented under subclass FOR 176. Foreign art collections including subject matter providing a specific element in an interface with which a user can interact.

FOR 190 Window (345/340):

This foreign art collection is indented under subclass FOR 189. Foreign art collections including subject matter wherein all interactions are constrained to one or more portions or regions of the display, which may display all or part of their related information.

FOR 191 Window scrolled to needed portion (345/341):

This foreign art collection is indented under subclass FOR 190. Foreign art collections including subject matter wherein, when a window displays only part of its related information, the user can selectively control which portion is displayed.

FOR 192 Layout modification (e.g., move or resize) (345/342):

This foreign art collection is indented under subclass FOR 190. Foreign art collection including subject matter wherein the place, location, or size of windows relative to the display may be modified.

FOR 193 Window differentiation (345/343):

This foreign art collection is indented under subclass FOR 190. Foreign art collection including subject matter wherein windows have attributes which distinguish them from other windows.

FOR 194 Priority (345/344):

This foreign art collection is indented under subclass FOR 193. Foreign art collection including subject matter wherein the attribute is priority, which is used to determine which window of a plurality is in the foreground when windows overlap.

FOR 195 Viewing lower priority window (345/345):

This foreign art collection is indented under subclass FOR 194. Foreign art collection including subject matter wherein the priority attributes are changed when the user needs to operate within a lower priority window.

FOR 196 Interwindow link or communication (345/346):

This foreign art collection is indented under subclass FOR 190. Foreign art collection including subject matter wherein windows have established relationships to other windows, allowing communication between windows, grouping of related windows into sets, or allowing operations to be applied in common to groups of windows.

FOR 197 Pop-up control (e.g., message or dialog box) (345/347):

This foreign art collection is indented under subclass FOR 189. Foreign art collections including subject matter wherein an interface element not previously displayed appears on the screen in response to user interaction or when user interaction is required.

FOR 198 Icon (345/348):

This foreign art collection is indented under subclass FOR 189. Foreign art collection including subject matter wherein an interface element is a graphical representation of a function or system resource which is accessed when the graphical representation is selected by user interaction.

FOR 199 Metaphoric icon object (345/349):

This foreign art collection is indented under subclass FOR 198. Foreign art collections including subject matter wherein an icon graphically suggests a real-world item which performs a function analogous to a function invoked by selection of the icon.

FOR 200 Indexed book or notebook (345/350):

This foreign art collection is indented under subclass FOR 199. Foreign art collection including subject matter wherein the meta object suggests a multipage text- or document-based item, and wherein user interaction with an associated sub-element causes a corresponding page to be displayed or selected.

FOR 201 Office layout (e.g., filing cabinet, desk) (345/351):

This foreign art collection is indented under subclass FOR 199. Foreign art collection including subject matter wherein the metaphoric object or objects suggest a business environment, enabling access to various items commonly found in a real-world workspace.

FOR 202 Menu (345/352):

This foreign art collection is indented under subclass FOR 189. Foreign art collection including subject matter wherein the interface element is a list of items from which the user may choose.

FOR 203 Sub-menu structure (345/353):

This foreign art collection is indented under subclass FOR 202. Foreign art collection including subject matter wherein the user may traverse a number of related and linked menu lists, based upon successive choices.

FOR 204 Using button array (345/354):

This foreign art collection is indented under subclass FOR 202. Foreign art collection including subject matter wherein the menu is composed of an arrangement of symbolic graphical selection indicia (e.g., pick region).

FOR 205 Interface represented by 3D space (345/355):

This foreign art collection is indented under subclass FOR 189. Foreign art collection including subject matter wherein the user appears to move within a 3D space of interface elements.

FOR 206 Hierarchy or network structure (345/356):

This foreign art collection is indented under subclass FOR 189. Foreign art collection including subject matter wherein interface elements are organized into a tree structure type or a linked node grouping.

FOR 207 Navigation within structure (345/357):

This foreign art collection is indented under subclass FOR 206. Foreign art collection including subject matter wherein the user can navigate through the interface by following the links from one node to another.

FOR 208 Gestured-based (345/358):

This foreign art collection is indented under subclass FOR 176. Foreign art collection including subject matter wherein a path or shape described by user input is indicative of a desired operation.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

CLASS 717 - DATA PROCESSING: SOFTWARE DEVELOPMENT, INSTALLATION AND MANAGEMENT

Definitions Modified (Place modifications in numerical sequence, where applicable):

Class Definition: In Section II, References to Other Classes, under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, appropriate subclasses for visual display systems with selective electrical control including display memory organization and structure for storing image data and manipulating image data between a display memory and display peripheral, particularly subclasses 156 through 184 for display peripheral interface input device, subclasses 204 through 215 for display driving control circuitry, subclasses 700 through 866 for computer operator interface, subclasses 418 through 475 for computer graphics processing, and subclasses 501 through 522 for computer graphic processing systems.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document presentation processing.

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, appropriate subclasses for visual display systems with selective electrical control including display memory organization and structure for storing image data and manipulating image data between a display memory and display peripheral, particularly subclasses 156-184 for display peripheral interface input device, subclasses 204-215 for display driving control circuitry, subclasses 418-475 for computer graphics processing, and subclasses 501-522 for computer graphic processing systems.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for computer operator interface.

Subclass 100: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 700 through 866for generalized operator interface and cross-reference art collection 967 for visual or iconic programming used in process control and configuration.
- 715, Data Processing: Presentation Processing of Document, appropriate subclasses for document and text processing, per se..

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 500-542 for document and text processing, per se, subclasses 700-866 for generalized operator interface and cross-reference art collection 967 for visual or iconic programming used in process control and configuration.

Subclass 102: Under See or Search Class:

Delete:

The entire reference to Cass 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 733-759 for concurrently established related or collaborative user interfaces including computer conferencing and computer supported cooperative work.

Subclass 105: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for visual display including operator interfaces and cross-reference art collection 967 for visual programming.

Subclass 106: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for visual display including operator interfaces.

Subclass 109: Under See or Search Class:

Delete

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for operator interfaces, per se; and cross-reference art collection 967 for iconic programming.

Subclass 113: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for operator interfaces, per se; and cross-reference art collection 967 for iconic programming.

Subclass 114: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 700-866 for operator interfaces, per se; and cross-reference art collection 967 for iconic programming.

Subclass 123: Under See or Search Class:

Delete:

- 345, Computer Graphics Processing, Operator Interface Processing, and Selective Visual Display Systems, subclasses 733 through 759 for operator interfaces aspects of work groups for plural users or sites and cross-reference art collection 971 for interface aspects of cooperative decision support systems for groups of users.
- 715, Data Processing: Presentation Processing of Document, subclass 511 for document version management under document processing.

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclass 511 for document version management under document processing, subclasses 733-759 for operator interface aspects of work groups for plural users or sites, and cross-reference art collection 971 for interface aspects of cooperative decision support systems for groups of users.

Subclass 125: Under See or Search Class:

Delete:

The entire reference to Class 345

<u>Insert:</u>

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses

733-759 for operator interface aspects of work groups for plural users or sites and cross-reference art collection 971 for interface aspects of cooperative decision support systems for groups of users.

Subclass 162: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 804-805 for linking of related data, objects, text data (e.g., hypertext), and other information which is intended for graphical display.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

CLASS 718 – ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: VIRTUAL MACHINE TASK OR PROCESS MANAGEMENT OR TASK MANAGEMENT/CONTROL

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclasses 104: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 804-805 for interwindow links and communication.

Subclasses 105: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 804-805 for interwindow links and communication.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

CLASS 719 - ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: INTERPROGRAM COMMUNICATION OR INTERPROCESS COMMUNICATION (IPC)

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 310: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 804-805 for interwindow links and communication.

Subclass 315: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 804-805 for interwindow links and communication, and subclasses 835-839 for icons and metaphoric icon objects.

Subclass 328: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses

733-749 for operator interface aspects of workgroup for plural users or sites; subclasses 764-862 for on-screen workspaces or objects; and subclasses 804-805 for interwindow links and communication.

Subclass 329: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 804-805 for interwindow links and communication.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

CLASS 725 - INTERACTIVE VIDEO DISTRIBUTION SYSTEMS

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 32: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, particularly subclasses 716-726 for operator interfaces for video sequencing or editing

Subclass 37: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 581-618 for display attribute control features.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 716-726 for on screen video interface features and functions that are not particularly directed to interactive video distribution systems, and subclasses 856-862 for cursor manipulation features.

D. CHANGES TO THE DEFINITIONS (Project No. E-6687)

CLASS D14 - RECORDING, COMMUNICATION, OR INFORMATION RETRIEVAL EQUIPMENT

<u>Definitions Modified</u> (Place modifications in numerical sequence, where applicable):

Subclass 485: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 619-689 for graphic object manipulation, and subclasses 441-472.3 and 947 for graphical processing of a character or font.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 762-862 for graphical object processing, especially subclasses 763, 835-839, and 846-847 for graphical processing involving icons.

Subclass 486: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 810-845 and 902 for graphical menu processing, particularly subclasses 841-843 for dropdown menus.

Subclass 488: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 619-689 for graphic object manipulation.
- 715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 762-862 for graphical object processing, especially subclasses 835-839 for a graphical user interface involving an icon array.

Subclass 489: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

715, Data Processing: Presentation Processing of Document, Operator Interface Processing, and Screen Saver Display Processing, subclasses 835-839 for a graphical user interface involving an icon array, and subclasses 846-847 for icons that are not arrayed.