

TOPIC: Classes 345 and 715
CONTACT: Editorial Division (SIRA/OCS), CPK3-902, 305-3566 or 305-3567
POST: Effective October 5, 2004

This is advance notice of Classification Order 1836, Project E-6687. The advance publication date is August 3, 2004. The final publication date is October 5, 2004. Please note: There may be changes to this information before the final publication date of the order. For further information on this order, please e-mail

The following classification changes will be effected by this order:

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

Project Leader(s):

Examiner(s):

Editor(s)

Editorial Assistant:

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

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

PROCESSING

- 6261C (500) DOCUMENT PRESENTATION PROCESSING
- 6263H . (500.1) Synchronization of diverse media
- 6262E . (501.1) Hypermedia
- 6264N . (502) Drawing
- 6265R . (503) Spreadsheet
- 6266D . . (504) Cell format control
- 6267W . (505) Form
- 6268Y . . (506) Form creation
- 6269T . . (507) Form filling
- 6270A . . . (508) Fitting data into field on form
- 6271C . (509) Table
- 6272E . . (510) Ruled lines
- 6273H . (511) Version management
- 6274N . (512) Annotation control
- 6275R . (513) Structured document (e.g., HTML, SGML, ODA, CDA)
- 6276D . (514) Hierarchical control
- 6277W . . (515) Compound document
- 6278Y . . . (516) Matching application process to displayed data type
- 6279T . (517) Layout
- 6280A . . (518) Spacing control
- 6281C . . . (519) Horizontal spacing
- 6282E . . (520) Area designation
- 6283H . . (521) Boundary processing
- 6284N . . (522) Format information in separate file
- 6285R . . (523) Format transformation
- 6286D . . (524) Detecting format code change
- 6287W . . (525) Pagination
- 6288Y . (526) Display processing
- 6289T . . (527) Print preview
- 6290A . . (528) Color attribute
- 6291C . . (529) Text attribute
- 6292E . (530) Edit, composition, or storage control
- 6293H . . (531) Text
- 6294N . . . (532) Dictionary

- 6295R . . . (533) Spell check
- 6296D . . . (534) Input of abbreviated word form
- 6297W . . . (535) Ideographic generator
- 6298Y . . . (536) Multilingual
- 6299T . . . (537) Footnoting
- 6300A . . . (538) Equation or formula processing
- 6301C . . (539) Block control
- 6302E . . (540) Replacement of element
- 6303H . . (541) Handwritten textual input
- 6304N . (542) Font selection
- 700 OPERATOR INTERFACE (E.G., GRAPHICAL USER INTERFACE)
- 701 . Force feedback interaction
- 702 . Tactile based interaction
- 703 . Cultural based (including language, time, monetary unit displayed)
- 704 . Playback of recorded user events (e.g., script or macro playback)
- 705 . Help presentation
- 706 . . Virtual character or avatar (e.g., animated person)
- 707 . . Adaptive to user skill level
- 708 . . Context sensitive
- 709 . . . Coaching (e.g., animated example, or handholding or show me execution)
- 710 . . . Input alert
- 711 . . . Tool tip (e.g., cursor position based)
- 712 . . . Topic roadmap or index
- 713 Hierarchical
- 714 . . Combining diverse help information (e.g., different sources)
- 715 . . Balloon or bubble appearance
- 716 . On screen video or audio system interface
- 717 . . Multiple diverse systems
- 718 . . . Mode switching interface (e.g., switching between TV and computer)
- 719 . . Video interface
- 720 . . . Video traversal control
- 721 . . . Indexed control
- 722 . . . Video parameter control
- 723 . . For video segment editing or sequencing
- 724 . . . Cut and paste operation
- 725 . . . Trimming
- 726 . . . Effects or transitions interface
- 727 . Audio user interface
- 728 . . Audio input for on-screen manipulation (e.g., voice controlled GUI)
- 729 . . For a visually challenged user
- 730 . Presentation to audience interface (e.g., slide show)
- 731 . . Authoring tool

- 732 . . Slide manipulating or editing
- 733 . For plural users or sites (e.g., network)
- 734 . . Interactive network representation of devices (e.g., topology of workstations)
- 735 . . . Configuration
- 736 . . . Network managing or monitoring status
- 737 . . . User navigation between devices
- 738 . . Network resource browsing or navigating
- 739 . . . Selecting from a resource list (e.g., address book)
- 740 . . Remote operation of computing device
- 741 . . Access control or permission
- 742 . . . Interactive portal (e.g., secure point of access)
- 743 . . . Access rights to interactive controls
- 744 . . Interface customization or adaption (e.g., client server)
- 745 . . . Based on stored usage or user profile (e.g., frequency of use, cookie)
- 746 . . . Interface conversion
- 747 . . . End user based (e.g., preference setting)
- 748 . User interactive multicomputer data transfer (e.g., file transfer)
- 749 . . Downloading remote executable (e.g., Java, CGI)
- 750 . Multiple users on a single workstation
- 751 . Computer supported collaborative work between plural users
- 752 . . Interactive email
- 753 . . Computer conferencing
- 754 . . . Multicursor (e.g., multiple on-screen pointers)
- 755 . . . Floor Control
- 756 . . . Real Time Video
- 757 . . . Virtual 3D environment
- 758 . . . Chat room
- 759 . . Group window
- 760 . Mark up language interface (e.g., HTML)
- 761 . Plural adjacent interactive display devices
- 762 . User interface development (e.g., GUI builder)
- 763 . . Graphical or iconic based (e.g., visual program)
- 764 . On-screen workspace or object
- 765 . . Customizing multiple diverse workspace objects
- 766 . . Z order of multiple diverse workspace objects
- 767 . . Focus control of multiple diverse workspace objects
- 768 . . Translucency or transparency interface element (e.g., invisible control)
- 769 . . Data transfer operation between objects (e.g., drag and drop)
- 770 . . . Cut and paste
- 771 . . Instrumentation and component modeling (e.g., interactive control panel, virtual device)
- 772 . . . Progress or activity indicator
- 773 . . . Virtual input device (e.g., virtual keyboard)
- 774 . . Ticker metaphor

- 775 .. Office layout metaphor (e.g., filing cabinet, desk)
- 776 .. Indexed book or notebook metaphor
- 777 .. Tab metaphor (e.g., property sheet)
- 778 .. Multiple virtual screen or desktop switching
- 779 .. Task bar or desktop control panel
- 780 .. Entry field (e.g., text entry field)
- 781 .. Window or viewpoint
- 782 ... 3D Perspective view of window layout
- 783 ... On-screen window list or index
- 784 ... Window scrolling
- 785 Autoscroll
- 786 Scroll tool (e.g., scroll bar)
- 787 With content attribute on scroll tool
- 788 ... Layout modification (e.g., move or resize)
- 789 Based on usage or user profile (e.g., frequency of use)
- 790 Overlap control
- 791 Always on top
- 792 Tiling or split pane
- 793 Cascading
- 794 Priority or overlap change (e.g., z-order)
- 795 Minimizing or send to bottom
- 796 Bring to top
- 797 Viewing lower priority window (e.g., overlapped windows)
- 798 Combining moving and resizing operations (e.g., moving causes
resizing)
- 799 Moving (e.g., translating)
- 800 Resizing (e.g., scaling)
- 801 Contained object scale change
- 802 ... Focus control
- 803 ... Window differentiation
- 804 ... Interwindow link or communication
- 805 On-screen link or communication (e.g., cue)
- 806 ... Window memory structure
- 807 Stored priority attribute
- 808 .. Pop-up control
- 809 .. Dialog box
- 810 .. Menu or selectable iconic array (e.g., palette)
- 811 ... Based on usage or user profile (e.g., frequency of use)
- 812 Preselection (e.g., best guess before mouse click)
- 813 Default selection item
- 814 ... Limited time selection opportunity
- 815 ... Sizing modification (e.g., scaling)
- 816 ... Partial input lookup (e.g., partial string lookup)
- 817 ... Context location indication (e.g., previous or next menu item
indication)

- 818 Simultaneous next and previous indication (e.g., menu road map)
- 819 Next menu indication
- 820 Previous menu indication
- 821 . . . Emphasis
- 822 Preselection emphasis
- 823 Selection or confirmation emphasis
- 824 Unavailable emphasis
- 825 . . . Dynamically generated menu items
- 826 . . . Add on item (e.g., software developed, customized)
- 827 . . . Mnemonic (e.g., accelerator key)
- 828 . . . Partial menu display (e.g., one menu item at a time)
- 829 Advancing to next menu item in the same menu
- 830 Scrolling (e.g., spin dial)
- 831 With specific input device
- 832 . . . Analog selection style
- 833 . . . Slider control
- 834 . . . Radial based (e.g., radial or pie menu)
- 835 . . . Selectable iconic array
- 836 3D icons
- 837 Compound or aggregate icon
- 838 Thumbnail or scaled image
- 839 Imitating real life object
- 840 . . . Using button array
- 841 . . . Sub-menu structure
- 842 Tear off
- 843 Pull down
- 844 . . . Timed
- 845 . . . Multiple selections in a single menu
- 846 . . Non-array icons
- 847 . . Shortcut
- 848 . . Interface represented by 3D space
- 849 . . Individual object
- 850 . . Navigation within 3D space
- 851 On-screen navigation control
- 852 . . Picking 3D object
- 853 . . Hierarchy or network structure
- 854 . . Navigation within structure
- 855 On-screen roadmap or index
- 856 . . Cursor
- 857 . . Pointer direction adjustment
- 858 . . Automatic position adjustment
- 859 . . Status indicator
- 860 Selection emphasis
- 861 Dynamically changed appearance (e.g., animated or live action)
- 862 . . Proximity detection

- 863 . Gesture-based
- 864 . For a small display screen (e.g., personal digital assistant, palm-top)
- 865 . Miscellaneous interface for the handicapped or disabled user
- 866 . Miscellaneous customization or adaptation
- 867 SCREEN SAVER DISPLAY
- 961 OPERATOR INTERFACE WITH VISUAL STRUCTURE OR
FUNCTION DICTATED BY INTENDED USE
- 962 . Operator interface for marketing or sales
- 963 . Calendar or scheduling
- 964 . CAD or CAM (e.g., interactive design tool)
- 965 . For process control and configuration
- 966 . . Computer process (e.g., operation of computer)
- 967 . . . Visual or iconic programming
- 968 . . . Interface for database querying and retrieval
- 969 . . Network layout and operation interface
- 970 . . Instrumentation and component modelling (e.g., interactive control
panel)
- 970.1 . Amusement or marital aid interface
- 971 COOPERATIVE DECISION SUPPORT SYSTEM FOR GROUP
OF USERS
- 972 INSERTED REAL-TIME VIDEO IN OPERATOR INTERFACE
- 973 SCROLL TOOL (E.G., WINDOW SCROLL BAR)
- 974 SLIDER CONTROL AS ON-SCREEN OBJECT IN OPERATOR
INTERFACE
- 975 POP-UP DIALOG BOX FOR ENTRY
- 976 3-D ICON
- 977 DYNAMIC ICON (E.G., ANIMATED OR LIVE ACTION)
- 978 AUDIO INTERACTION AS PART OF AN OPERATOR
INTERFACE
- FOR 176 OPERATOR INTERFACE (345/326)
- FOR 177 . Interaction in a television environment (345/327)
- FOR 178 . . For video segment editing or sequencing (345/328)
- FOR 179 . For plural users or sites (345/329)
- FOR 180 . . Computer conferencing (345/330)
- FOR 181 . . Computer supported cooperative work (345/331)
- FOR 182 . . . Group window (345/332)
- FOR 183 . Interface customization or edition (345/333)
- FOR 184 . . Graphical appearance (345/334)
- FOR 185 . . Link between object and task or function (e.g., client/server)
(345/335)
- FOR 186 . Having on-line help (345/336)
- FOR 187 . . Adaptive to user skill level (345/337)
- FOR 188 . . Context sensitive (345/338)
- FOR 189 . On-screen workspace or object (345/339)
- FOR 190 . . Window (345/340)
- FOR 191 . . . Window scrolled to needed portion (345/341)

- FOR 192 . . . Layout modification (e.g., move or resize) (345/342)
- FOR 193 . . . Window differentiation (345/343)
- FOR 194 Priority (345/344)
- FOR 195 Viewing lower priority window (345/345)
- FOR 196 . . . Interwindow link or communication (345/346)
- FOR 197 . . Pop-up control (e.g., message or dialog box) (345/347)
- FOR 198 . . Icon (345/348)
- FOR 199 . . . Metaphoric icon object (345/349)
- FOR 200 Indexed book or notebook (345/350)
- FOR 201 Office 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)

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

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

Newly established subclass definitions are in the attachment below:

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

CLASS 340 – COMMUNICATIONS: ELECTRICAL

Definitions Modified (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.

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

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

Definitions Modified (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.

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

CLASS 343 – COMMUNICATIONS: RADIO WAVE ANTENNAS

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

Class Definition: 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.

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

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

DEFINITIONS MODIFIED (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

Insert the following new title for Class 345:

COMPUTER GRAPHICS PROCESSING AND SELECTIVE VISUAL
DISPLAY SYSTEMS

**List of Classes and See or Search Class References with Class 345 Title
Changes:**

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, 45/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, 7.56/SC 345

340, 14.1/SC 345

340, 286.01/SC 345

340, 286.13/SC 345

340, 40,7.1/SC 345

340, 40,7.2/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

340, 995.16/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, 14.03/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.)

378 98/SC 345

Class 379 (Class 345 title changed in See or Search Class (SC) locations below.)

379 88.11/SC 345

379 93.18/SC 345

379 93.19/SC 345

379, 916/SC 345

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

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

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

396 289/SC 345

396 290/SC 345

396 291/SC 345

396 292/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

Delete (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.

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

CLASS 348 – TELEVISION

Definitions Modified (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.

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

CLASS 355 – PHOTOCOPYING

Definitions Modified (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 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.

Insert:

- 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.

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

CLASS 358 - FACSIMILE AND STATIC PRESENTATION PROCESSING

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, subclasses 418 through 475 for 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 867 for operator interface processing.
- 715 Data Processing: Presentation Processing of Document, appropriate subclasses for document processing performed by a computer for presentation.

Insert:

- 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.

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

CLASS 360 - DYNAMIC MAGNETIC INFORMATION STORAGE OR RETRIEVAL

Definitions Modified (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

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.

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

CLASS 361 - ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES

Definitions Modified (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

Insert:

- 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.

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

CLASS 382 – IMAGE ANALYSIS

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

Subclass 311: Under See or Search Class:

Delete:

The entire reference to Class 345

Insert:

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.

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

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

Definitions Modified (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.

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

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

Definitions Modified (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.

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

CLASS 706 – DATA PROCESSING - ARTIFICIAL INTELLIGENCE

Definitions Modified (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.

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

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.

Insert:

- 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 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.

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 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 102: 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.

- 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 on-screen 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

Definitions Modified (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

Insert:

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)

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

Subclass 228: 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 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

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, 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.

Insert:

- 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

Definitions Modified (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

Definitions Modified (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

**List of Classes and See or Search Class References with Class 715 Title
Changes:**

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) locations below.)

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

Delete (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 definition:

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.

Subclass 503: 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 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 definition:

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.

DEFINITIONS ESTABLISHED (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:

- 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.
- 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.

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).

702 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 graphic allocation 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 said 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 the interface is used for interacting with video or audio systems and applications. 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:

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 854 and 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.

SEARCH THIS 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 user must have permission before gaining control of a graphical user interface. 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 user environment is transformed to a different environment affording similar or analogous function through a new presentation mode. 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.

749 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.

SEARCH THIS 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.

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 a plurality of operators are given access to or control of the functions or data maintained in one computer system. Subject matter wherein users at the multiple displays join in completing a given task as a group.

SEARCH THIS CLASS:

709, Electrical Computers and Digital Processing Systems: Support, 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.

SEARCH THIS CLASS:

709, Electrical Computers and Digital Processing Systems: Support, 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.

SEARCH THIS CLASS:

709, Electrical Computers and Digital Processing Systems: Support, 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.

SEARCH THIS CLASS:

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 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.

SEARCH THIS CLASS:

345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 419-427 for details of three-dimensional graphics processing, subclasses 849-853, 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.

SEARCH THIS 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.

767 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.

768 Focus control of multiple diverse workspace objects:

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.

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.

782 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 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.

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.

803 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.

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.

811 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 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.

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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.

827 Mnemonic (e.g., accelerator key):

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

828 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.

829 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.

831 With specific input device:

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

833 Slider control:

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

834 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 Pointer direction adjustment:

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

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.

861 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.

382, 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.

864 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.

865 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 CLASS:

345, Computer Graphics Processing and Selective Visual Display Systems, subclass 729, for operator 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 CLASS:

- 345, Computer Graphics Processing and Selective Visual Display Systems, subclasses 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 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 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, 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 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 operator control interface is used to communicate 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 or Plural Processor Synchronization, subclasses 200-253, 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 means 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:

345, 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 collections 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 collections 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 collections 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 assis 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 assis 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 collections 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 collections 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 collections 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 collections 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 collections including subject matter wherein windows have established relationships to other win, 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 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 199 Metaphoric icon object (345/349):

This foreign art collection is indented under subclass FOR 189. 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 collections including subject matter wherein the meta 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.

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

This foreign art collection is indented under subclass FOR 199. Foreign art collections 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 collections 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 collections 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 collections 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 collections 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 collections 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 collections 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 collections 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 866 for 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 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 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

Insert:

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

Definitions Modified (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)

Definitions Modified (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

Definitions Modified (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

Definitions Modified (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.