

# Exhibit 19

# Claim 1 of the '795 Patent

1. A computer readable medium comprising:

a first portion having stored therein data relating to a first set of **graphical user interface objects** whose individual appearances are **collectively associated with a first common theme;**

a second portion having stored therein data relating to a second set of **graphical user interface objects** each of which have the **same function as an associated interface object** in said first set, but whose individual appearances are **collectively associated with a second common theme;** and

a third portion having stored therein computer executable code wherein, upon execution of instructions embedded in said code by a computer, a user interface associated with the computer **selectively displays one of said first and second sets of graphical user interface objects.**

## Claim 5 of the '795 Patent

5. A computer readable medium encoded with a drawing resource that can be used to draw an object on a user interface, said layout resource comprising a plurality of data structures comprising:

**a first set of graphical interface objects whose individual appearances are associated with a first common theme; and**

**a second set of graphical user interface objects each of which have the same function as an associated interface object in said first set, but whose individual appearances are associated with a second common theme.**

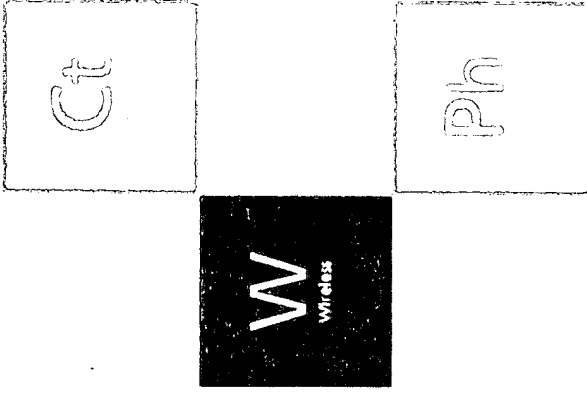
## Claim 9 of the '795 Patent

9. A computer system comprising:

- a storage means for storing data relating to first and second sets of **graphical user interface objects;**
- a user interface for selectively displaying one of said sets of **graphical user interface objects;** and
- a **control means** for switching the display from one set of graphical interface objects to another set of graphical interface objects, wherein individual appearances of the first set of **graphical interface objects** are collectively **associated with a first common theme** and each of the second set of **graphical interface objects** **having the same function as an associated interface object in said first set**, but whose individual appearances are **collectively associated with a second common theme.**

# Claim 12 of the '795 Patent

12. A computer system comprising:
- a storage means for storing data relating to first and second sets of **graphical user interface objects**;
  - a graphical user interface for **selectively displaying one of said sets of graphical user interface objects**; and
  - a selection means for switching the display from one set of interface objects to another set of interface objects, whereby the user interface displays interface objects using one of the sets of graphical user interface objects, said selection means including:
    - a **control layer** having a **pattern look-up table** with indexed entries containing data related to patterns and colors used to create interface objects; and
    - a **command** means for commanding the **control layer to draw a pattern on the interface referring to at least one of the indexed entries in the pattern look-up table**, wherein individual appearances of the first set of graphical interface objects are **collectively associated with a first common theme** and each of the second set of graphical interface objects **having the same function as an associated interface object** in said first set, but whose individual appearances are collectively **associated with a second common theme**.

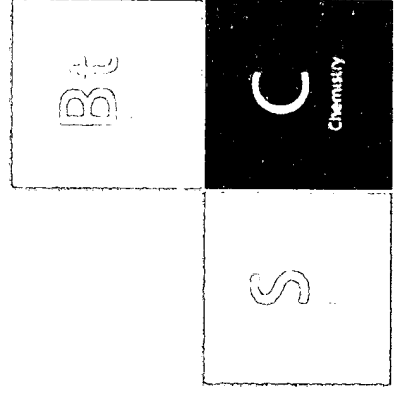
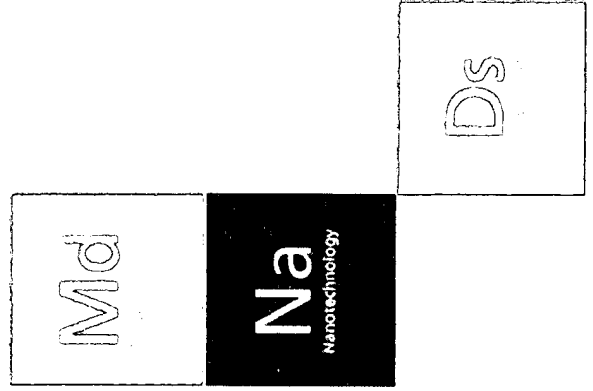


# Apple Inc.

## Ex Parte Reexamination 90/010,966

U.S. Patent No. 6,239,795 to Ulrich et al.

April 11, 2011



# Agenda

- I. Introductions
- II. Status of the Litigation
- III. Overview of Patentability
- IV. Story of the Invention
- V. Technical Overview of '795 Patent and contrast with Boyce
- VI. Discussion of the Office Action and References
- VII. Conclusion and Summary of Arguments

Please fee free to ask questions at any time and to guide the discussion.

# Introductions

- **Inventor:**
  - Robert R. Ulrich
- **Technical Expert:**
  - Aaron Marcus
- **Apple Inc.:**
  - Chi Chang, Esq., Reg. No. 52,717
- **SKGF:**
  - Robert G. Sterne, Reg. No. 28,912
  - Glenn J. Perry, Reg. No. 28,458
  - Sal Bezos, Reg. No. 60,889
  - Richard D. Collier III, Reg. No. 60,390



# Robert R. Ulrich (Inventor)

- Education:
  - Univ. of Utah, B.S. Computer Science (1986)
  - Univ. of Utah, B.S. Electrical Engineering (1986)
- Employment:
  - Schlumberger (1986-1988)
  - Symantec (1989-1991)
  - PenSoft (1991-1992)
  - Apple, Inc. (1992-present) – coded for every version of Mac OS since 7.5
- U.S. Patents (20 issued)
  - User interface implementation (graphics, sound, animation)
  - Pen input
  - Backup systems
- U.S. Patent Applications
  - 5+ Patents pending on backup systems



**Sterne Kessler  
Goldstein Fox**

ATTORNEYS AT LAW

# Aaron Marcus, Technical Expert

- **Education:**
  - Princeton University BA, Physics 1965
  - Yale University MFA, BFA, Graphic Design 1968
- **Computing and Graphics Honors:**
  - AIGA Fellow (2007)
  - Member, CHI (highest honor of ACM SIGCHI) (2008)
  - Member, ICGRADA 20<sup>th</sup> Century Graphic Design Hall of Fame (2003)
  - Co-inventor SAP Sustainability Enterprise Software patent application (2010)
- **Employment:**
  - Aaron Marcus and Associates, Inc. (consulting) - President (1982 – present)
  - University of California / Berkeley – Lecturer, graphics specialist (1979-1982)
  - Lawrence Berkeley Laboratory – Staff Scientist (1981-1982)
  - East-West Center – Research Fellow (1978)
  - Princeton University – Assistant Professor, graphic design consultant (1968-1977)
- **Consultant to:**
  - Microsoft, Apple, AT&T Bell Labs, 3 Com, 3M, HP, IBM and many others
- **Publications and Lectures (full listing to be attached with response)**
  - 6 Books and/or Monographs
  - 25+ Refereed Journal Publications
  - 250 + articles in Conference Proceedings and/or professional publications

**The Cross-GUI Handbook**  
For Multiplatform User Interface Design

*Aaron Marcus • Nick Smilovich • Lynne Thompson*

Microsoft

Technical expert,  
Aaron Marcus  
wrote book for  
comparing GUIs  
across platforms

**STOP**  
**WINDOWS**  
**PRESENTATION**  
**MANAGER**

# *Status of the Litigation*

## **Nokia Corp. v. Apple Inc. (D. Del.)**

The '795 Patent is in concurrent litigation  
(*Nokia v. Apple*, 1:09-cv-00791 (D. Del.))  
before Chief Judge Sleet.  
Claim construction issues are being briefed.

## **Apple's Business Model**

Apple has adopted a business strategy based on the convergence of personal computers, mobile communications, and digital consumer electronics, and produced cutting-edge, technologically superior, and user-friendly devices.

See, *Nokia v. Apple*, 1:09-cv-00791, Apple Inc.'s First Amended Answer, p. 3 (Filed Feb. 19, 2010)

# *Overview of Patentability*

# Key limitations of claims 1-12 not taught by Boyce or Woodcock

- “theme” (vs. “scheme” of Boyce)
- “graphical user interface objects...collectively associated with a first common theme”
- “graphical user interface objects...collectively associated with a second common theme”
- “selectively displays one of said first and second sets of graphical user interface objects”
- “two sets of objects having corresponding functions”
- “control means”/“selection means”
  - (means + function clause in claim 9)
- “control layer”
  - (claim 12, corresponding to an embodiment of an “appearance management layer”)
- “pattern look up table”
- “command means”

These limitations are highlighted in red in the independent claims that follow. The dependent claims incorporate these limitations.



# Claim 1 of the '795 Patent

1. A computer readable medium comprising:  
a first portion having stored therein data relating to a first set of **graphical user interface objects** whose individual appearances are **collectively associated with a first common theme;**  
a second portion having stored therein data relating to a second set of **graphical user interface objects** each of which have the **same function as an associated interface object** in said first set, but whose individual appearances are **collectively associated with a second common theme;** and  
a third portion having stored therein computer executable code wherein, upon execution of instructions embedded in said code by a computer, a user interface associated with the computer **selectively displays one of said first and second sets of graphical user interface objects.**

## Claim 5 of the '795 Patent

5. A computer readable medium encoded with a drawing resource that can be used to draw an object on a user interface, said layout resource comprising a plurality of data structures comprising:

**a first set of graphical interface objects whose individual appearances are associated with a first common theme; and**

**a second set of graphical user interface objects each of which have the same function as an associated interface object in said first set, but whose individual appearances are associated with a second common theme.**

## Claim 9 of the '795 Patent

9. A computer system comprising:

- a storage means for storing data relating to first and second sets of **graphical user interface objects;**
- a user interface for selectively displaying one of said sets of **graphical user interface objects;** and
- a **control means** for switching the display from one set of graphical interface objects to another set of graphical interface objects, wherein individual appearances of the first set of **graphical interface objects** are collectively **associated with a first common theme** and each of the second set of **graphical interface objects** **having the same function as an associated interface object in said first set**, but whose individual appearances are **collectively associated with a second common theme.**

# Claim 12 of the '795 Patent

12. A computer system comprising:
- a storage means for storing data relating to first and second sets of **graphical user interface objects**;
  - a graphical user interface for **selectively displaying one of said sets of graphical user interface objects**; and
  - a selection means for switching the display from one set of interface objects to another set of interface objects, whereby the user interface displays interface objects using one of the sets of graphical user interface objects, said selection means including:
    - a **control layer** having a **pattern look-up table** with indexed entries containing data related to patterns and colors used to create interface objects; and
    - a **command** means for commanding the **control layer to draw a pattern on the interface referring to at least one of the indexed entries in the pattern look-up table**, wherein individual appearances of the first set of graphical interface objects are **collectively associated with a first common theme** and each of the second set of graphical interface objects **having the same function as an associated interface object** in said first set, but whose individual appearances are collectively **associated with a second common theme**.

# *Story of the Invention*

# History and Context

- Days of DOS: Every application controlled the whole screen.
  - Every app had to know about screen display
  - Almost every app looked different
- GUI introduced a static, consistent look and feel for the entire system. Windows were drawn by a system window manager.
- In 1993, prior to the '795 invention, the look and feel of the system was defined by static OS code implemented by the window manager.
  - Changes in look and feel required changes to system code.
  - This was the state of the art when '795 invention was made. At the time, Apple spent millions of dollars and many man years each time changes were to be made to the look and feel of the Macintosh operating system and window manager.
  - Likewise, Microsoft and other GUI vendors faced similar challenges.
- See “The Cross GUI Handbook for Multi-Platform User Interface Design” by Aaron Marcus.



# Objectives and Results of the Invention

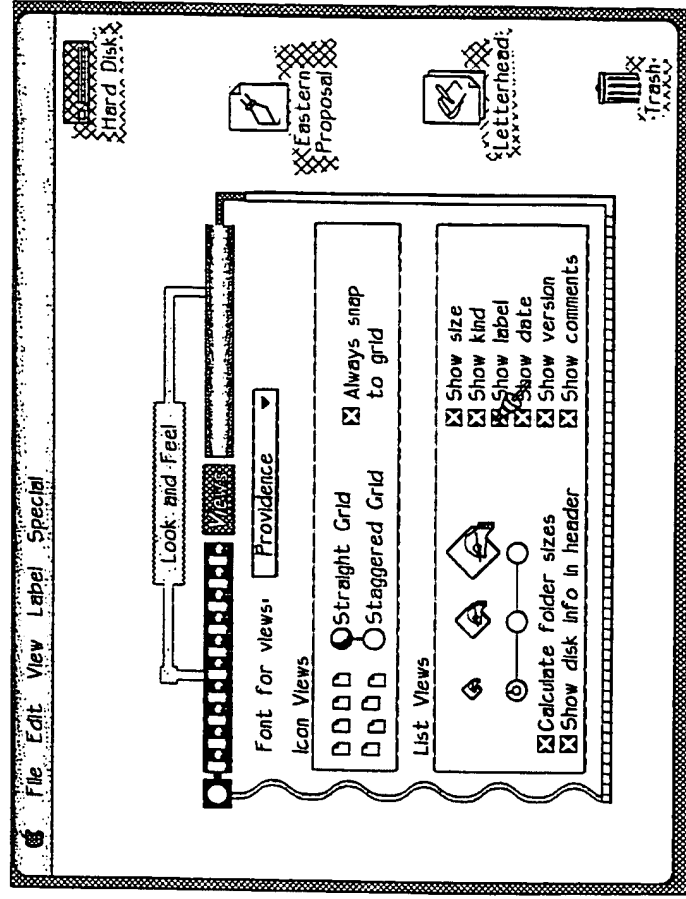
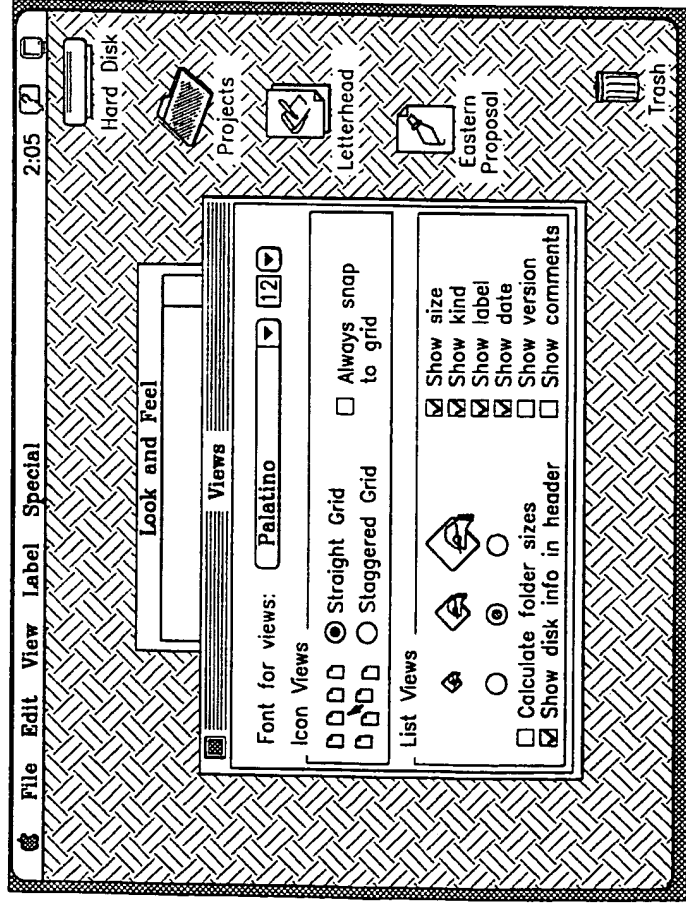
**Objective 1:** Develop a system to allow Apple the ability to modify look and feel without needing to change the underlying system window manager code. Prior to invention, changing user interface appearance or behavior required modifying large amounts of legacy system code.

**Objective 2:** Develop a system in which variable looks and feels are defined by a set of graphical user interface objects and associated data which can be modified independently of the window manager.

“Sets of objects can be grouped into themes to provide a user with a distinct overall impression of the interface” (‘795 Abstract)

**Results:** ‘795 family of patents introduced an appearance management layer which allows modification of the user interface without modifying system code.

# '795 Example User Interface Themes



Appearance management layer allowed control over GUI objects as a theme, modifying color, pattern, shape, behavior, and sound. This is not equivalent to changing the colors of a fixed list of window components.



## Benefits of Appearance Mgmt Layer

- Complete control of GUI look and feel (e.g. color, patterns, behavior, audio, etc.)
  - This is not possible with Boyce “color schemes”.
- User interface look and feel can be entirely replaced without modifying core system code
- No need for application software to be aware of drawing procedures for each potential “theme”
- Allows rapid prototyping of new interface paradigms
- Faster, lower cost customization
- Ability to produce product differentiation for platforms
- Greater ROI for company

# Success of the Appearance Management Layer

The “theme” approach to managing look and feel, originated in the family of patents including the ‘795 patent, has become the standard approach taken in Apple Macintosh computer which has become highly successful in the marketplace and which has become an Apple flagship product.

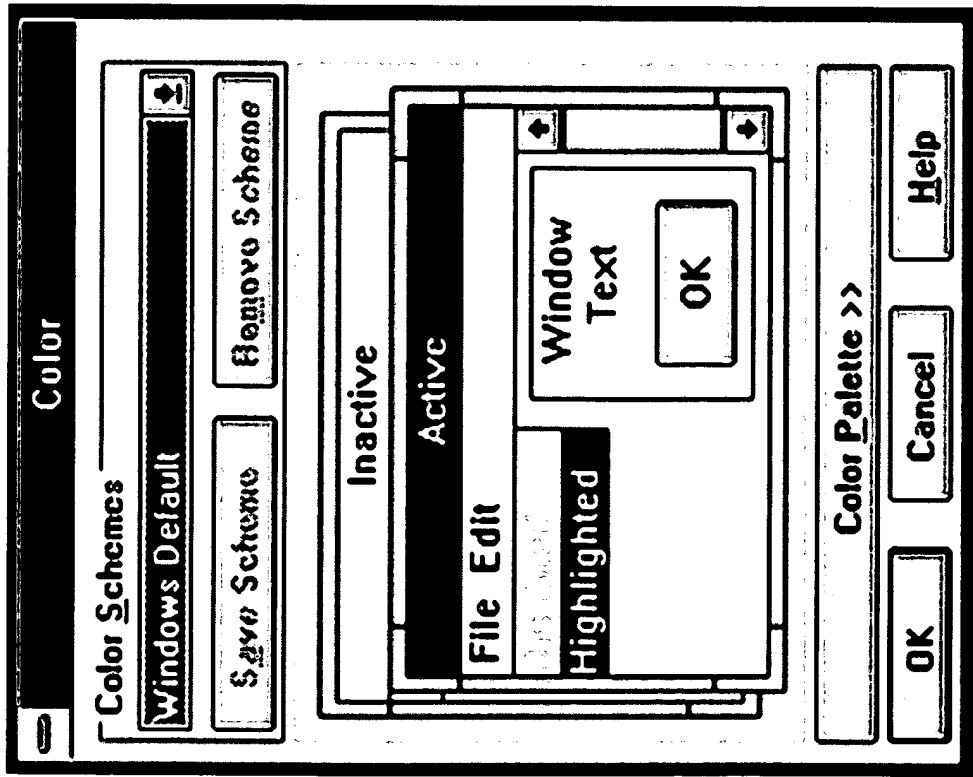
5,963,206  
6,239,795 ← (this patent)  
6,243,102  
6,404,433  
6,466,228  
6,710,782  
6,909,437  
6,958,758  
7,609,279

# ***Technical Overview of the '795 Patent and contrast with Boyce***

# ‘795 Claimed “Theme” vs. Boyce “color scheme”

- Claims 1-12 all require objects associated with a common “theme”.
- “Theme” is well-defined and explained in the ‘795 specification.  
Broadest reasonable construction of “theme” must take into account the explanation of “theme” in the specification.
- Requestor equates the Boyce “color scheme” to ‘795 claimed “theme” (but saying it doesn’t make it so).
  - Request page 13 table: “Boyce describes Windows 3 software including a first color scheme or theme...”
  - Request page 15 table: “Boyce describes Windows 3 software including a second color scheme or theme...”
- Misleading - the word “theme” does not appear in Boyce.
- Although equivalence is suggested by the Requestor, the ‘795 claimed “theme” is quite different from Boyce “color scheme.”

# According to Boyce, what is a “color scheme”?



**Table 9.1**  
Color Settings in [colors] section of WIN.INI

Setting	Description
ActiveBorder=	Active window border.
ActiveTitle=	Active window title bar.
AppWorkspace=	Application work space, such as the background color of the Program Manager window.
Background=	The color of the desktop.
InactiveBorder=	Inactive window borders.
InactiveTitle=	Inactive window titles.
Menu=	Background color for all menus.
MenuText=	Color of text in all menus.
Scrollbar=	Color of horizontal and vertical scrollbars.
TitleText=	Color of text in the active window title bar.
Window=	The color of the background for each window, such as the color of open-group windows in the Program Manager window.
WindowFrame=	Color of all window frames.
WindowText=	Color of text inside a window, such as the color of text in Notepad.

There are also six other settings you can control if you directly edit the WIN.INI file. You cannot set the following six settings from the Control Panel:

Setting	Description
ButtonFace=	Color of buttons, such as OK and Cancel.
ButtonShadow=	The shadow color that appears below the right edge of each button.
ButtonText=	The color of text on the face of a button, such as the "OK" on the OK button.
GrayText=	Color of commands and options that are not available (dimmed).
Hilight=	Background color for highlighted text.
HilightText=	Text color of highlighted text.

# Boyce scheme only changes color of user interface



ActiveWindowBorder = Gray

ActiveTitle = Blue

TitleText = White

Note there are NOT multiple WIN.INI files.

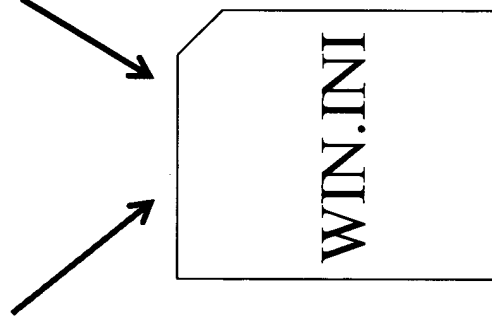


ActiveWindowBorder = Red

ActiveTitle = Black

TitleText = White

As such, there is no color scheme "switching". Choosing a color set modifies a single system settings file, overwriting previous contents.



## What is a “theme”?

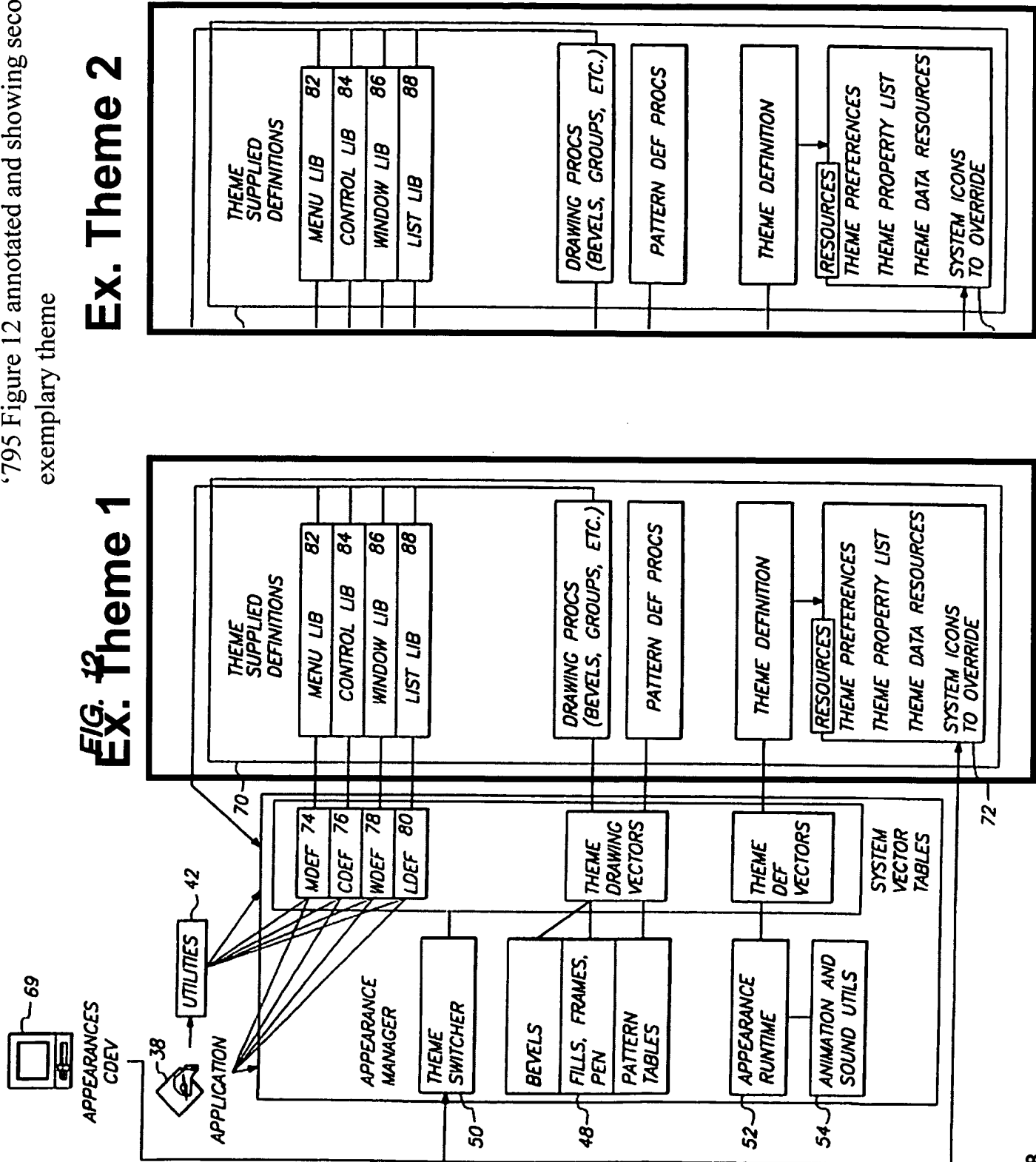
- “...themes are coordinated designs of the interface elements which combine to create a distinct visual and audio environment on the display.” ( ‘795 patent column 19, lines 57-59)
- “Themes” can include:
  - Shape
  - Color
  - Interaction
  - Sound
  - Line weight
  - Images (photos)
  - Textures and other visual patterns
- Themes are implemented by the Appearance Manager Layer as described by the specification quotes on slide 27 and by Fig. 12 (annotated) following those quotes.

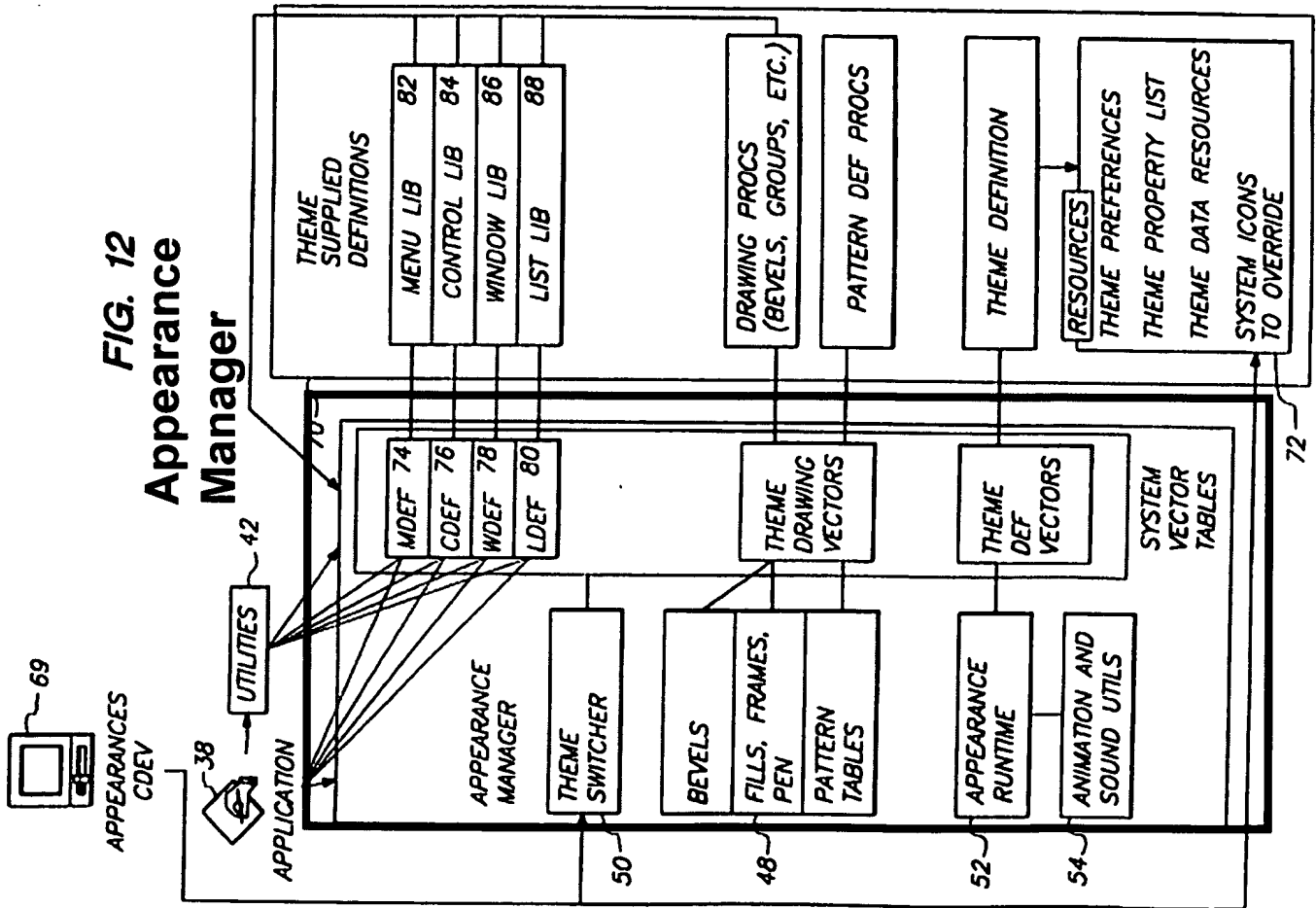
# What is the claimed “theme”? Specification quotes

- “As used herein, the terms “theme” and “themes” refer to coordinated designs of interface objects and object parts that create a distinct visual appearance on the display.” ( ‘795 patent column 5, line 60)
- “Themes can be created which include sets of desktop objects that are designed, both in their visual appearance and behavior, to project an overall impression to the area. The user can switch between themes, even at runtime, to change this overall impression.” ( ‘795 patent column 3, line 30)
- “Having described exemplary systems and methods for abstracting the appearance and behavior of a user interface from its functionality using switchable drawing procedures and pattern look-up tables, the following description indicates how these capabilities can be used together to manifest sets of appearance and behavior attributes on a user interface which blend together to project a common theme.” ( ‘795 patent column 19, line 50)



'795 Figure 12 annotated and showing second exemplary theme





**FIG. 12**  
**Appearance**  
**Manager**

“Appearance management layer 40” controls theme related objects for the user interface independently of any particular application.

This permits the user to dynamically customize appearance and/or behavior of interface objects through “coordinated designs of interface objects and object parts that create a distinct visual appearance on the display” (“themes”). ‘795 patent col. 5 lines 61-62.

## “795 “Theme” vs. Boyce “Scheme”

- “795 “themes” : “coordinated designs of interface objects and object parts that create a distinct visual appearance on the display.” ‘795 patent col. 5, lines 60-62
- Boyce teaches color “schemes”, which are merely color values for system defined constant variables in a list grouped by sections in WIN.INI and CONTROL.INI
- Apple’s approach abstracts specific colors and patterns from the application which are referenced through the AML.
- Boyce: simply defines color values for a limited set of named window components, e.g., a “TitleColor”

# Abstracted, Flexible Appearance Management Layer vs. Hardwired values

## Apple abstracts AML

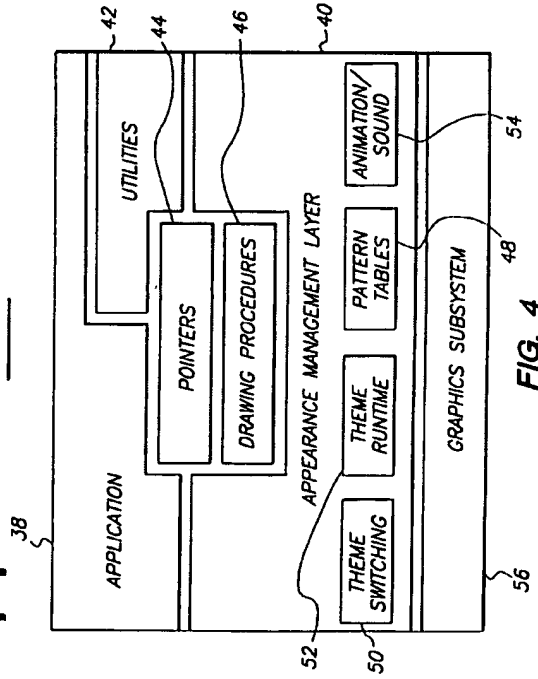


FIG. 4

“appearance management layer” acts as a translator between users and the software code that draws interface objects.

## Boyce: Lists values

**Table 9.1**  
**Color Settings in [colors] section of WIN.INI**

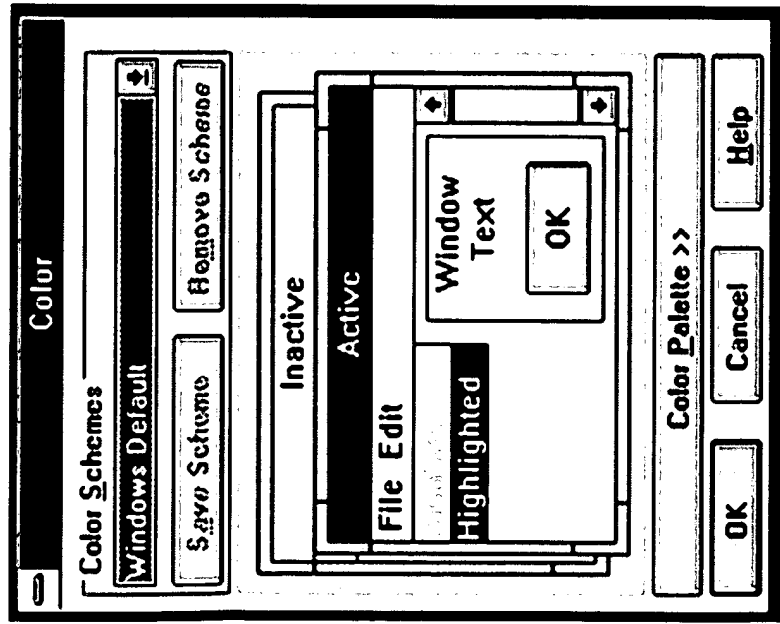
Setting	Description
ActiveBorder=	Active window border.
ActiveTitle=	Active window title bar.
AppWorkSpace=	Application work space, such as the background color of the Program Manager window.
Background=	The color of the desktop.
InactiveBorder=	Inactive window borders.
InactiveTitle=	Inactive window titles.
Menu=	Background color for all menus.
MenuText=	Color of text in all menus.
Scrollbar=	Color of horizontal and vertical scrollbars.
TitleText=	Color of text in the active window title bar.
Window=	The color of the background for each window, such as the color of open-group windows in the Program Manager window.
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WindowText=	Color of text inside a window, such as the color of text in Notepad.

There are also six other settings you can control if you directly edit the WIN.INI file. You cannot set the following six settings from the Control Panel:

Setting	Description
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ButtonShadow=	The shadow color that appears below the right edge of each button.
ButtonText=	The color of text on the face of a button, such as the "OK" on the OK button.
GrayText=	Color of commands and options that are not available (dimmed).
Highlight=	Background color for highlighted text.
HighlightText=	Text color of highlighted text.

# Contrast to Boyce "color scheme"

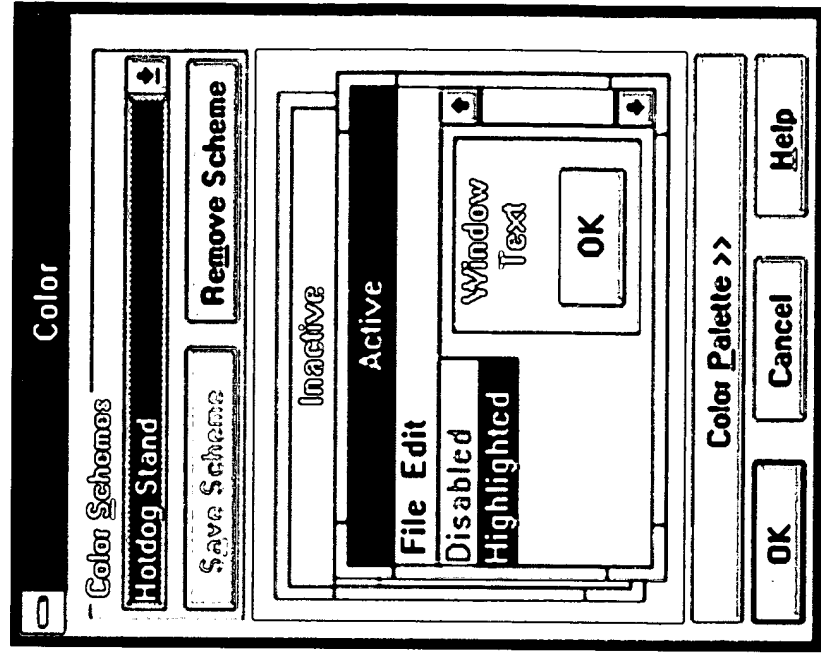
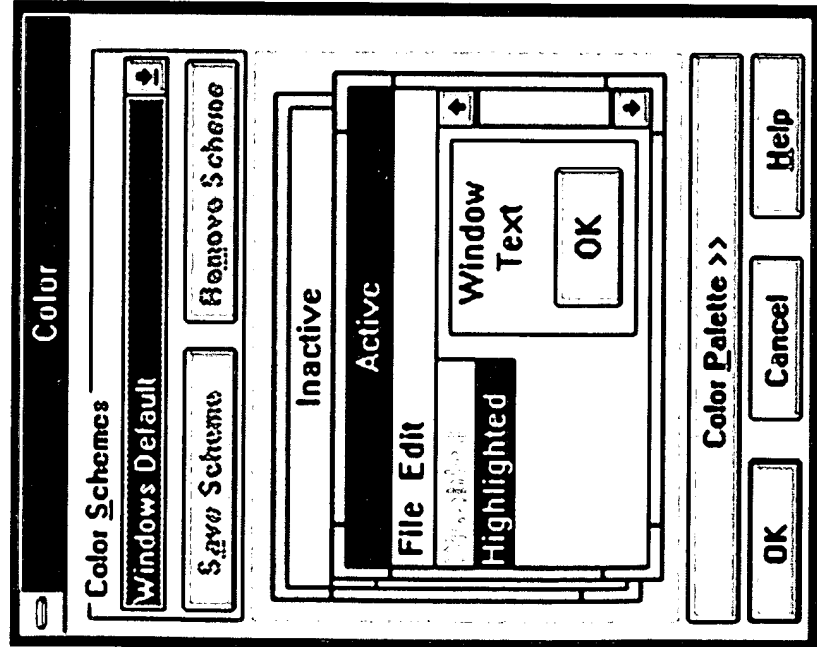
Boyce color "scheme" is implemented using a flat file (win.ini) list of user interface components each of which can be displayed with a user-selected color.



**Table 9.1**  
**Color Settings in [colors] section of WIN.INI**

Setting	Description
ActiveBorder=	Active window border.
ActiveTitle=	Active window title bar.
AppWorkspace=	Application work space, such as the background color of the Program Manager window.
Background=	The color of the desktop.
InactiveBorder=	Inactive window borders.
InactiveTitle=	Inactive window titles.
Menu=	Background color for all menus.
MenuItem=	Color of text in all menus.
Scrollbar=	Color of horizontal and vertical scrollbars.
TitleText=	Color of text in the active window title bar.
Window=	The color of the background for each window, such as the color of open-group windows in the Program Manager window.
WindowFrame=	Color of all window frames.
WindowText=	Color of text inside a window, such as the color of text in Notepad.

That's all you do with Boyce.



# ***Discussion of the Office Action and the Boyce Reference***

## Claim Status Overview

- Claims 1-12 under *Ex Parte* Reexamination
- '795 patent contains independent claims 1, 5, 9 and 12
- The Office Action rejected claim 1-12 under 35 U.S.C. § 102(b) as being anticipated by Boyce
- The Office Action rejected claims 4, 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Boyce in view of Woodcock (Microsoft Dictionary)
- Patentability of claims 13-15 are not subject to reexamination.
- Following focuses on independent claims 1,5, 9 and 12 and applies to respective dependent claims.



# Claim 1 of the '795 Patent

1. A computer readable medium comprising:  
a first portion having stored therein data relating to a first set of **graphical user interface objects** whose individual appearances are **collectively associated with a first common theme;**  
a second portion having stored therein data relating to a second set of **graphical user interface objects** each of which have the **same function as an associated interface object** in said first set, but whose individual appearances are **collectively associated with a second common theme;** and  
a third portion having stored therein computer executable code wherein, upon execution of instructions embedded in said code by a computer, a user interface associated with the computer **selectively displays one of said first and second sets of graphical user interface objects.**

# Claim 1 of the '795 Patent

## **Request Document (p. 15) Makes Incorrect and Unsupported Equivalences between Scheme/Theme**

*“Boyce describes Windows 3 software including a first color scheme or theme (e.g., the Monochrome color scheme shown in Figures 9.2 and 9.3) which stores data relating to attributes of a set of graphical user interface components or objects collectively associated with that color scheme. Each of the objects in the Ocean color scheme has the same function as that object in the Monochrome color scheme.” (pp. 203-205)*

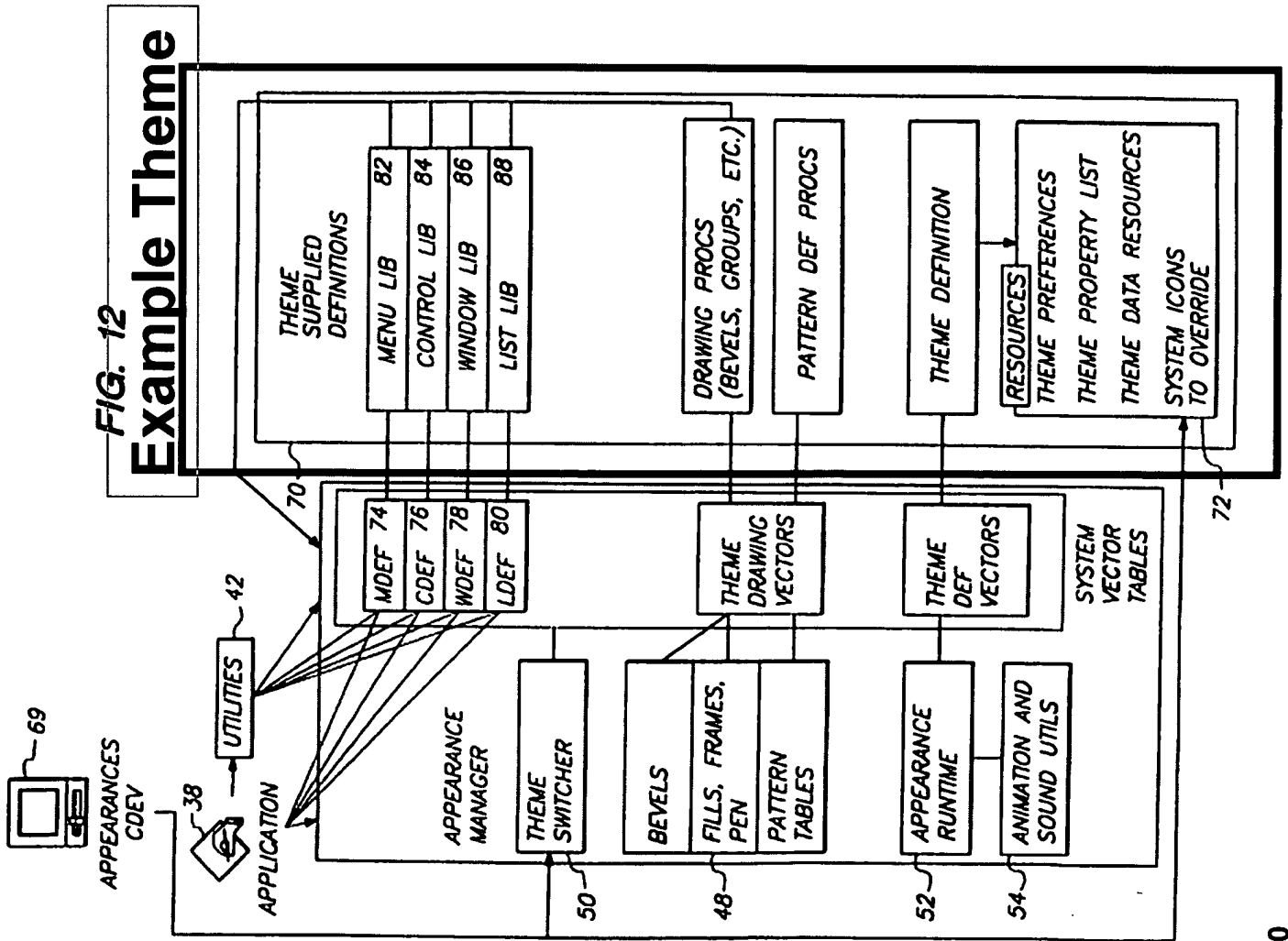
# Claim 1 of the '795 Patent

## **Boyce (p. 3-205) does not mention Themes or GUI objects, only Schemes and Window Components/GUI Objects**

*“When you choose the Color icon in the Control Panel, the Color dialog box appears (see Figure 9.2). The first dialog box lists the existing color schemes in CONTROL.INI. You can choose from one of the predefined color schemes by selecting a color scheme from the drop-down list and then choosing OK. The predefined settings in CONTROL.INI for the chosen color scheme are then applied to the desktop window components. The changes are immediate and can be seen in the sample image in the dialog box.”*

# There are at least 5 arguments why claim 1 should be confirmed and a NIRC issued as to claim 1 and its dependent claims

- Boyce and Woodcock fail to teach each of the features of claim 1 of the '795 Patent for at least the following reasons:
  - 1. References do not teach “themes” as claimed.
  - 2. References do not teach “graphical user interface objects whose individual appearances are collectively associated with a first common theme” as claimed.
  - 3. References do not teach “graphical user interface objects whose individual appearances are collectively associated with a second common theme” as claimed.
  - 4. The references do not teach two sets of objects having corresponding functions as claimed.
  - 5. The references do not teach “selectively displays one of said first and second sets of graphical user interface objects” as claimed.



1. "Themes" not taught. Boyce "color scheme is not a "theme"

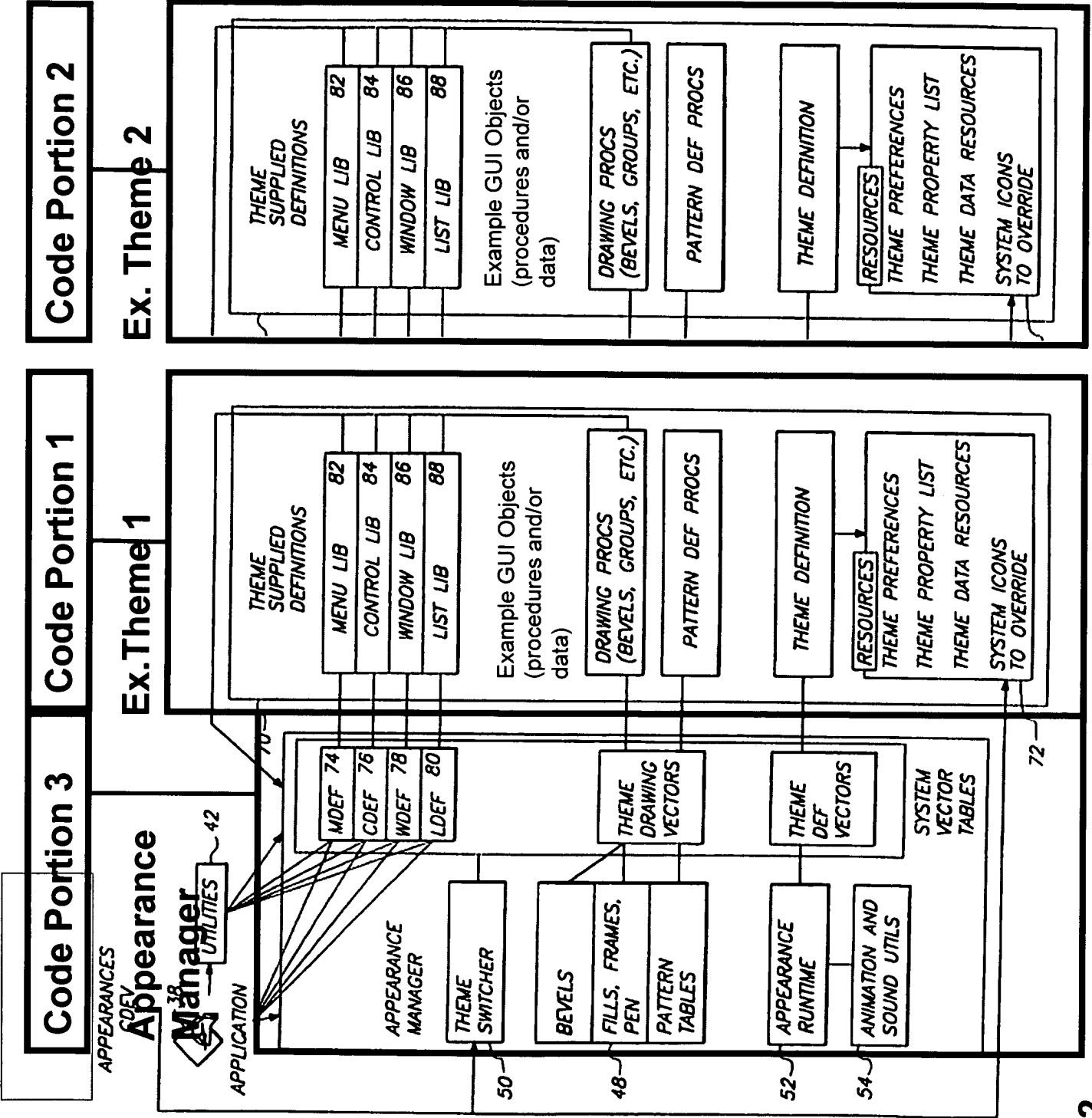
# Boyce describes an approach that uses a flat file containing a simple set of pre-defined constants defining the colors of fixed window components.

**Table 9.1**  
Color Settings in [colors] section of WIN.INI

Setting	Description
ActiveBorder=	Active window border.
ActiveTitle=	Active window title bar.
AppWorkspace=	Application work space, such as the background color of the Program Manager window.
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ButtonText=	The color of text on the face of a button, such as the "OK" on the OK button.
GrayText=	Color of commands and options that are not available (dimmed).
Highlight=	Background color for highlighted text.
HighlightText=	Text color of highlighted text.



2,3. GUI objects associated with themes.

4. Two sets of objects with corresponding functions.

# '795 Themes are more than just "color schemes"

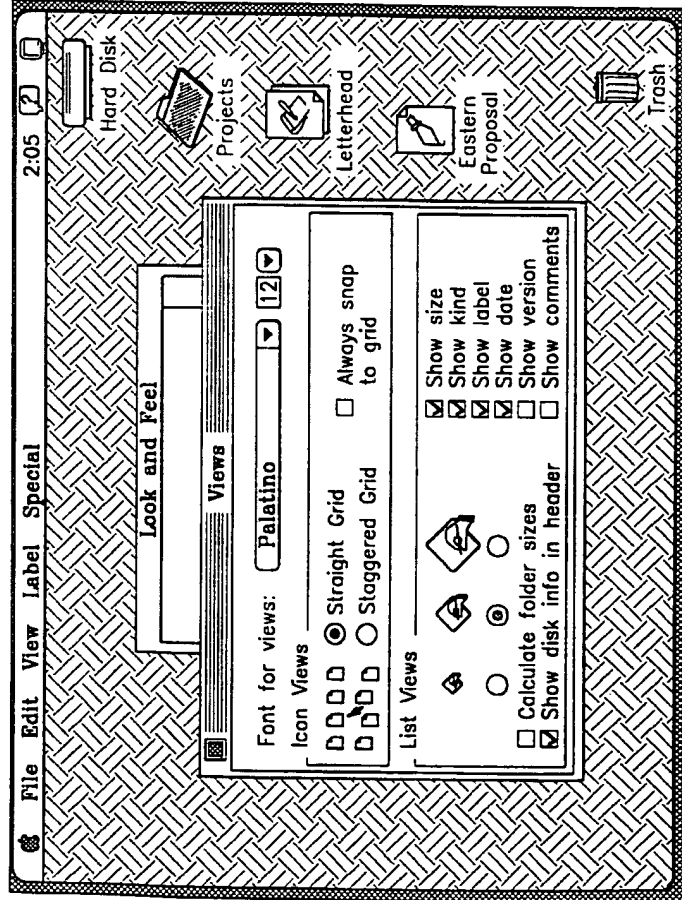


FIG. 2D

Theme "1"

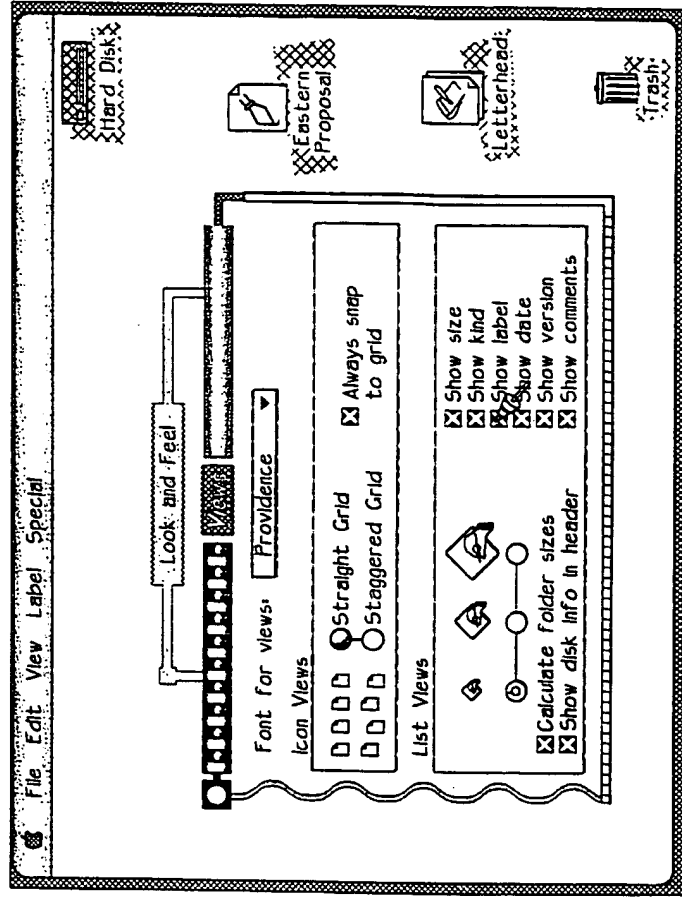


FIG. 2E

Theme "2"



Code Portion 3

Code Portion 1

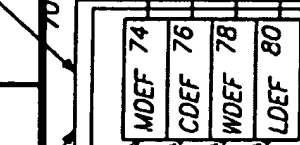
Code Portion 2

APPEARANCES

COVE  
Appearance  
Manager  
UTILITIES



APPLICATION



APPEARANCE  
MANAGER

THEME  
SWITCHER

BEVELS

FILLS, FRAMES,  
PEN

PATTERN  
TABLES

APPEARANCE  
RUNTIME

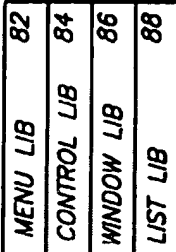
ANIMATION AND  
SOUND UTILS

THEME  
DRAWING  
VECTORS

THEME  
DEF  
VECTORS

SYSTEM  
VECTOR  
TABLES

THEME  
SUPPLIED  
DEFINITIONS

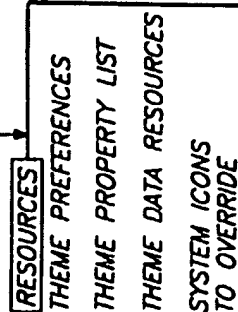


Example GUI Objects  
(procedures and/or data)

DRAWING PROCS  
(BEVELS, GROUPS, ETC.)

PATTERN DEF PROCS

THEME DEFINITION



Ex. Theme 1

Ex. Theme 2

5. '795 Appearance Management Layer selectively displays one set of GUI objects in accordance with one theme or the other.

Boyce overwrites a set of predefined settings in a system preferences file.

5. Here are the named window components of Boyce with their definitions.

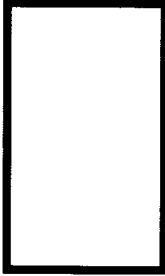
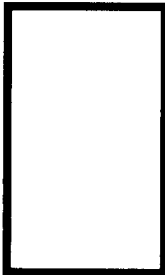
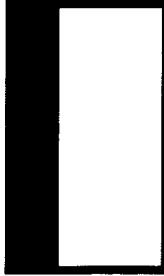
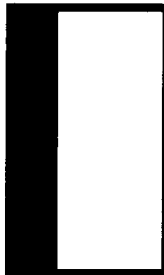
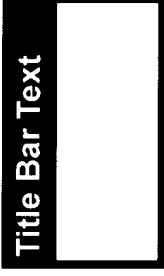

**Table 9.1**  
**Color Settings in [colors] section of WIN.INI**

<i>Setting</i>	<i>Description</i>
<b>ActiveBorder=</b>	Active window border.
<b>ActiveTitle=</b>	Active window title bar.
<b>AppWorkspace=</b>	Application work space, such as the background color of the Program Manager window.
<b>Background=</b>	The color of the desktop.
<b>InactiveBorder=</b>	Inactive window borders.
<b>InactiveTitle=</b>	Inactive window titles.
<b>Menu=</b>	Background color for all menus.
<b>MenuText=</b>	Color of text in all menus.
<b>Scrollbar=</b>	Color of horizontal and vertical scrollbars.
<b>TitleText=</b>	Color of text in the active window title bar.
<b>Window=</b>	The color of the background for each window, such as the color of open-group windows in the Program Manager window.
<b>WindowFrame=</b>	Color of all window frames.
<b>WindowText=</b>	Color of text inside a window, such as the color of text in Notepad.

There are also six other settings you can control if you directly edit the WIN.INI file. You cannot set the following six settings from the Control Panel:

<i>Setting</i>	<i>Description</i>
<b>ButtonFace=</b>	Color of buttons, such as OK and Cancel.
<b>ButtonShadow=</b>	The shadow color that appears below the right edge of each button.
<b>ButtonText=</b>	The color of text on the face of a button, such as the "OK" on the OK button.
<b>GrayText=</b>	Color of commands and options that are not available (dimmed).
<b>Highlight=</b>	Background color for highlighted text.
<b>HighlightText=</b>	Text color of highlighted text.

5. Boyce examples of color setting changes for a set of pre-defined window components.

Scheme 1	Scheme 2	Setting	Description
		ActiveBorder	Active window border
		ActiveTitle	Active window title bar
		TitleText	Color of text in active window title bar

## Claim 5 of the '795 Patent

5. A computer readable medium encoded with a drawing resource that can be used to draw an object on a user interface, said layout resource comprising a plurality of data structures comprising:
- a first set of graphical interface objects whose individual appearances are associated with a first common theme; and**
  - a second set of graphical user interface objects each of which have the same function as an associated interface object in said first set, but whose individual appearances are associated with a second common theme.**

## There are at least 4 arguments why claim 5 should be confirmed and a NIRC issued as to claim 5 and its dependent claims

- Boyce and Microsoft Dictionary fail to teach each of the features of claim 5 of the '795 Patent for at least the following reasons:
  - 1. The references do not teach “themes” as claimed.
  - 2. The references do not teach “graphical user interface objects whose individual appearances are associated with a first common theme” as claimed.
  - 3. The references do not teach “graphical user interface objects whose individual appearances are associated with a second common theme” as claimed.
  - 4. The references do not teach two sets of objects having corresponding functions as claimed.
- Arguments same as previously made with respect to claim 1

## Claim 9 of the '795 Patent

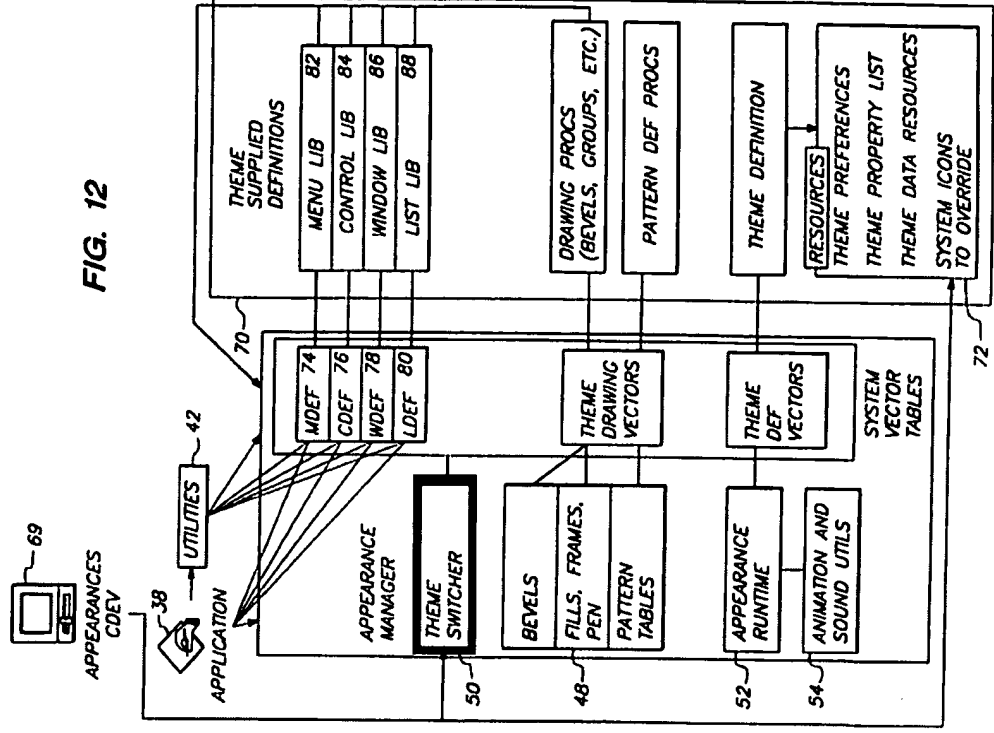
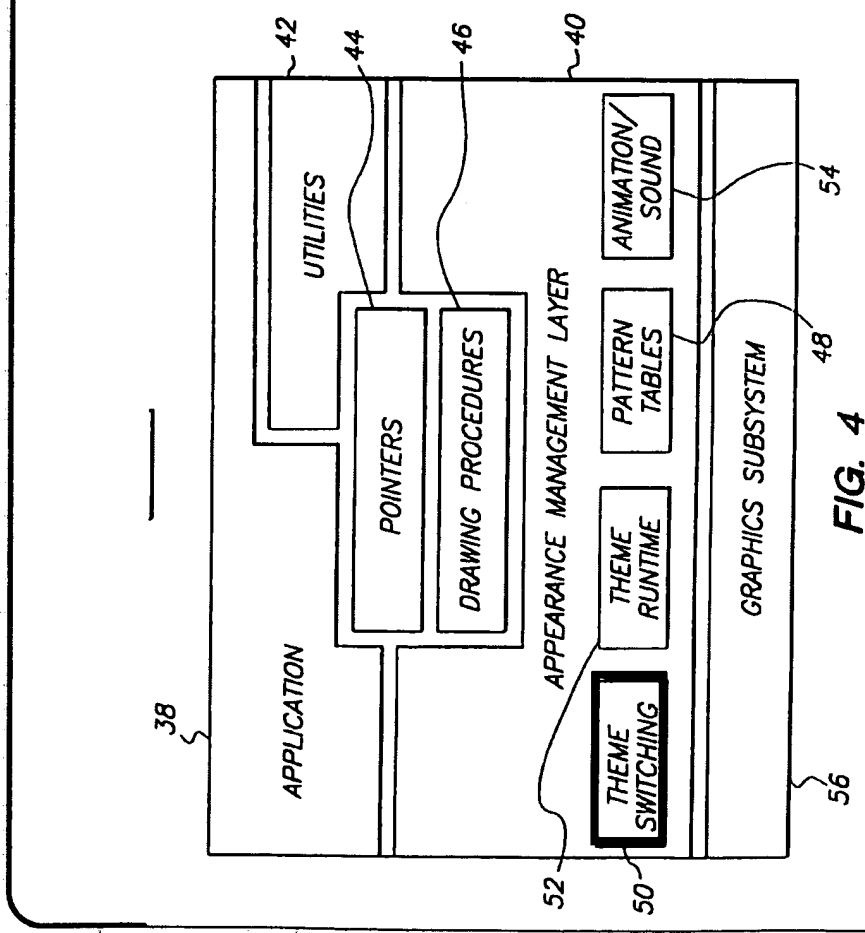
9. A computer system comprising:  
a storage means for storing data relating to first and second sets of **graphical user interface objects**;  
a user interface for selectively displaying one of said sets of **graphical user interface objects**; and  
a **control means** for switching the display from one set of graphical interface objects to another set of graphical interface objects,  
wherein individual appearances of the first set of **graphical interface objects** are collectively **associated with a first common theme** and each of the second set of **graphical interface objects having the same function as an associated interface object in said first set**, but whose individual appearances are **collectively associated with a second common theme**.

## There are at least 3 arguments why claim 9 should be confirmed and a NIRC issued as to claim 9 and its dependent claims

- Boyce and Microsoft Dictionary fail to teach each of the features of claim 9 of the '795 Patent for at least the following reasons:
    - 1. The references do not teach “themes” as claimed.
    - 2. The references do not teach a “control means” as claimed

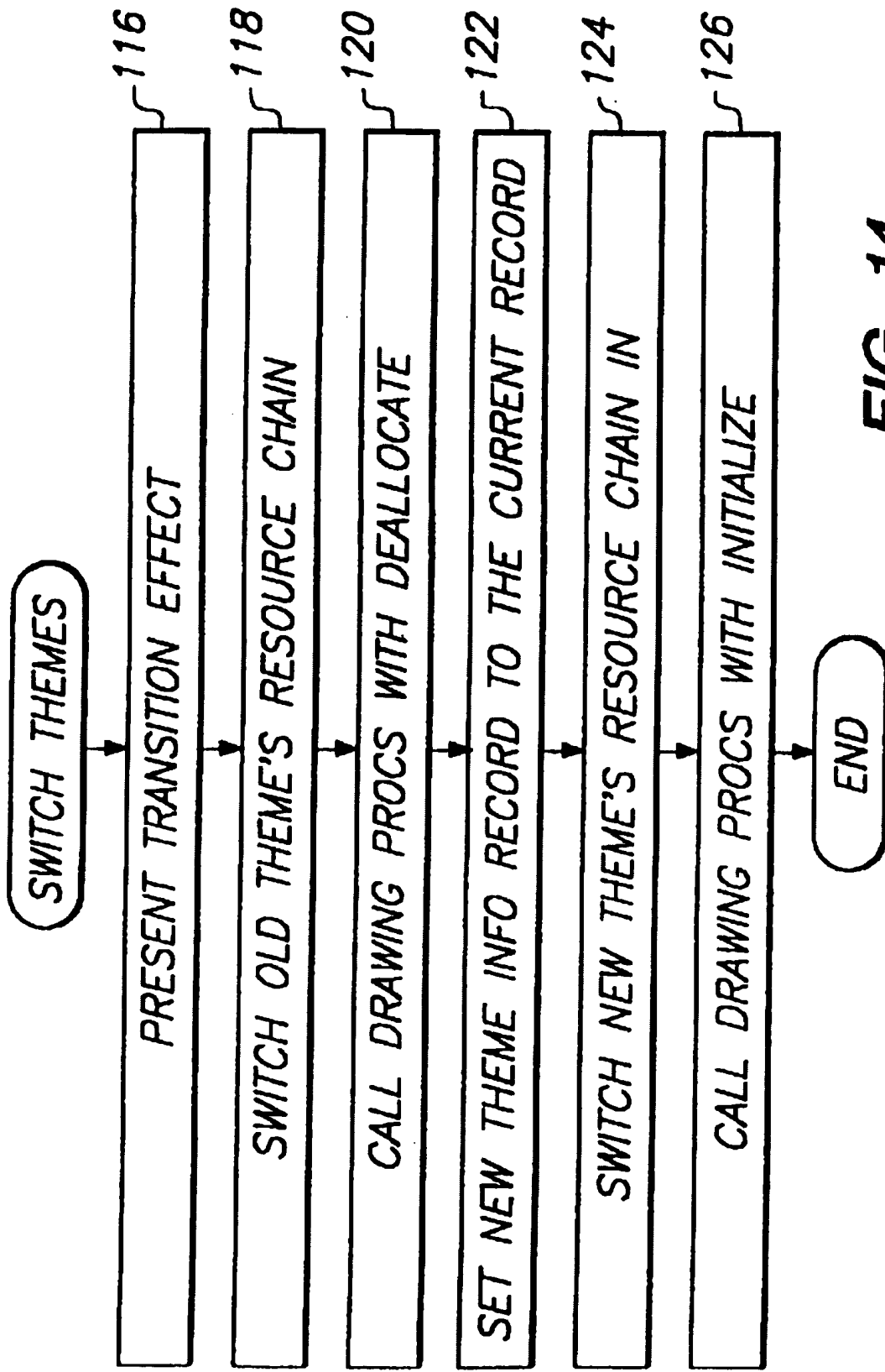
The “control means” is claimed as a “means + function” clause and refers to the specification “appearance management layer”. The “appearance management layer” is described throughout the patent as the device which controls and switches themes.
  - 3. The references do not teach two sets of objects having corresponding functions.
- Arguments 1 and 3 previously made apply to claim 9 as well.
  - The following relates to argument 2 directed to the “control means”

# '795 "control means" includes theme switcher





# Exemplary Explanation of Switching Themes



**FIG. 14**

Switching “themes” is very different from Boyce changing “schemes”

# Claim 12 of the '795 Patent

12. A computer system comprising:
- a storage means for storing data relating to first and second sets of **graphical user interface objects**;
  - a graphical user interface for **selectively displaying one of said sets of graphical user interface objects**; and
  - a selection means for switching the display from one set of interface objects to another set of interface objects, whereby the user interface displays interface objects using one of the sets of graphical user interface objects, said selection means including:
    - a **control layer** having a **pattern look-up table** with indexed entries containing data related to patterns and colors used to create interface objects; and
    - a **command** means for commanding the control layer to draw a pattern on the interface referring to at least one of the indexed entries in the pattern look-up table, wherein individual appearances of the first set of graphical interface objects are collectively associated with a first common theme and each of the second set of graphical interface objects having the same function as an associated interface object in said first set, but whose individual appearances are collectively associated with a second common theme.

# There are at least 6 arguments why claim 12 should be confirmed and a NIRC issued as to claim 12

- Boyce and Microsoft Dictionary fail to teach each of the features of claim 12 of the '795 Patent for at least the following reasons:
  - 1. The references do not teach “selectively displaying”
  - 2. The references do not teach the claimed “selection means for switching the display from one set of interface objects to another set of interface objects”
  - 3. The references do not teach GUI objects associated with themes as claimed.
  - 4. **The references do not teach a “control layer having a pattern look-up table” as claimed .**
  - 5. **The references do not teach the claimed “command means”**
  - 6. The references do not teach two sets of objects having corresponding functions.
- Argument 2 is similar to the “control means” argument made with respect to claim 9 and will not be repeated here.
- Arguments 1, 3 and 6 have been previously presented with respect to other claims and apply to claim 12 as well.
- We will now focus on arguments 4 and 5, namely the ‘control layer’ and ‘command means’

4. Boyce doesn't teach the claim 12 "control layer having a pattern look-up table" which is the appearance management layer 40.

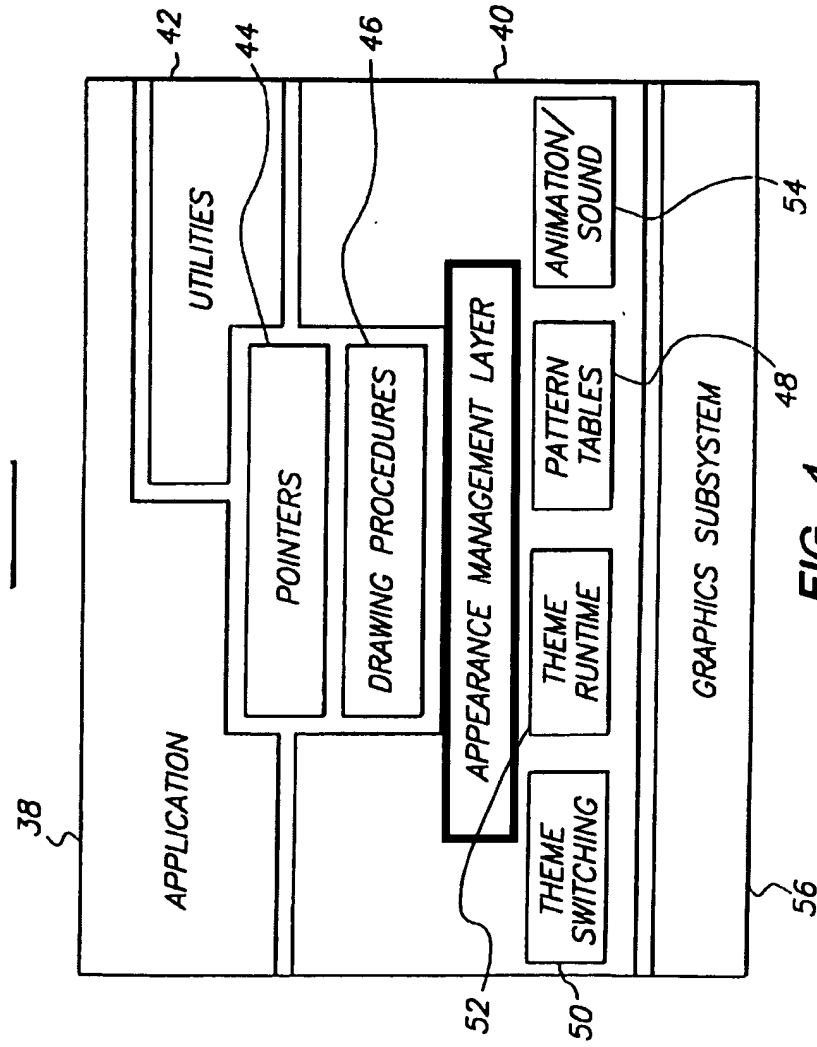


FIG. 4

"Appearance management layer 40" controls objects for all applications (independently of any particular application). permits user to dynamically customize appearance and behavior of interface objects through "coordinated designs of interface objects and object parts that create a distinct visual appearance on the display ("theme").

"appearance management layer" acts as a translator between users and the software code that draws interface objects

## Boyce doesn't teach the claimed "pattern look up tables"

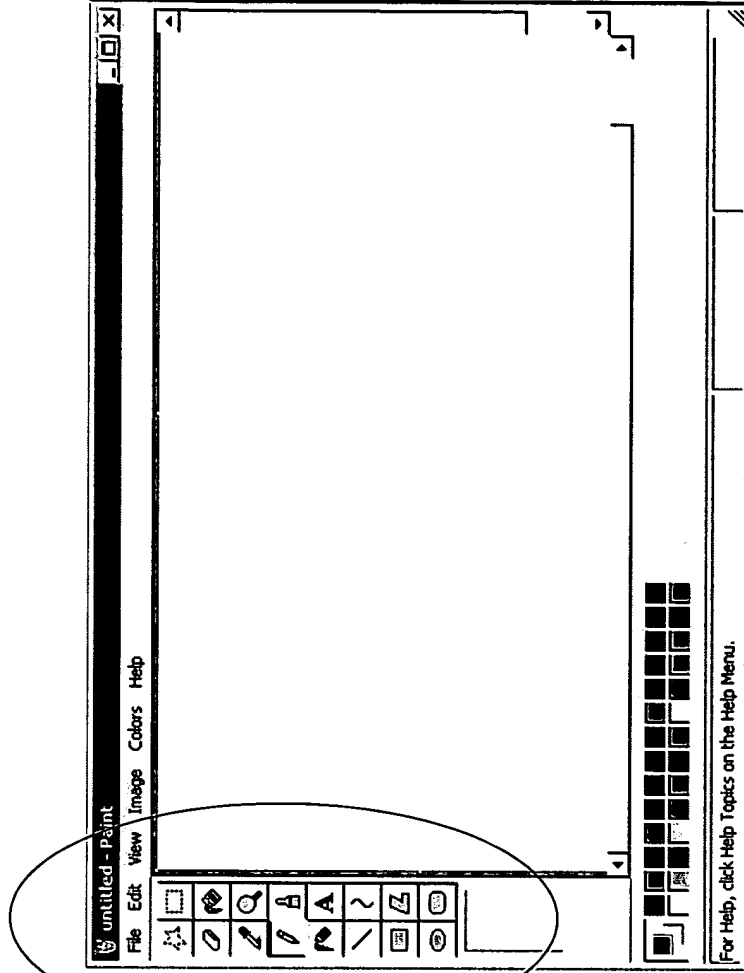
- 1. "Pattern look-up tables" as defined in '795 may contain colors, patterns, or other arbitrary data required to draw areas of the screen, not just colors. ('795 col 9, 1 59-63)

Boyce doesn't teach a pattern look-up table with theme-defined index entries containing arbitrary data defining colors and patterns that can be displayed on the interface.

- Boyce provides only a set of well-defined named colors which are applied by the system to the standard window interface components.

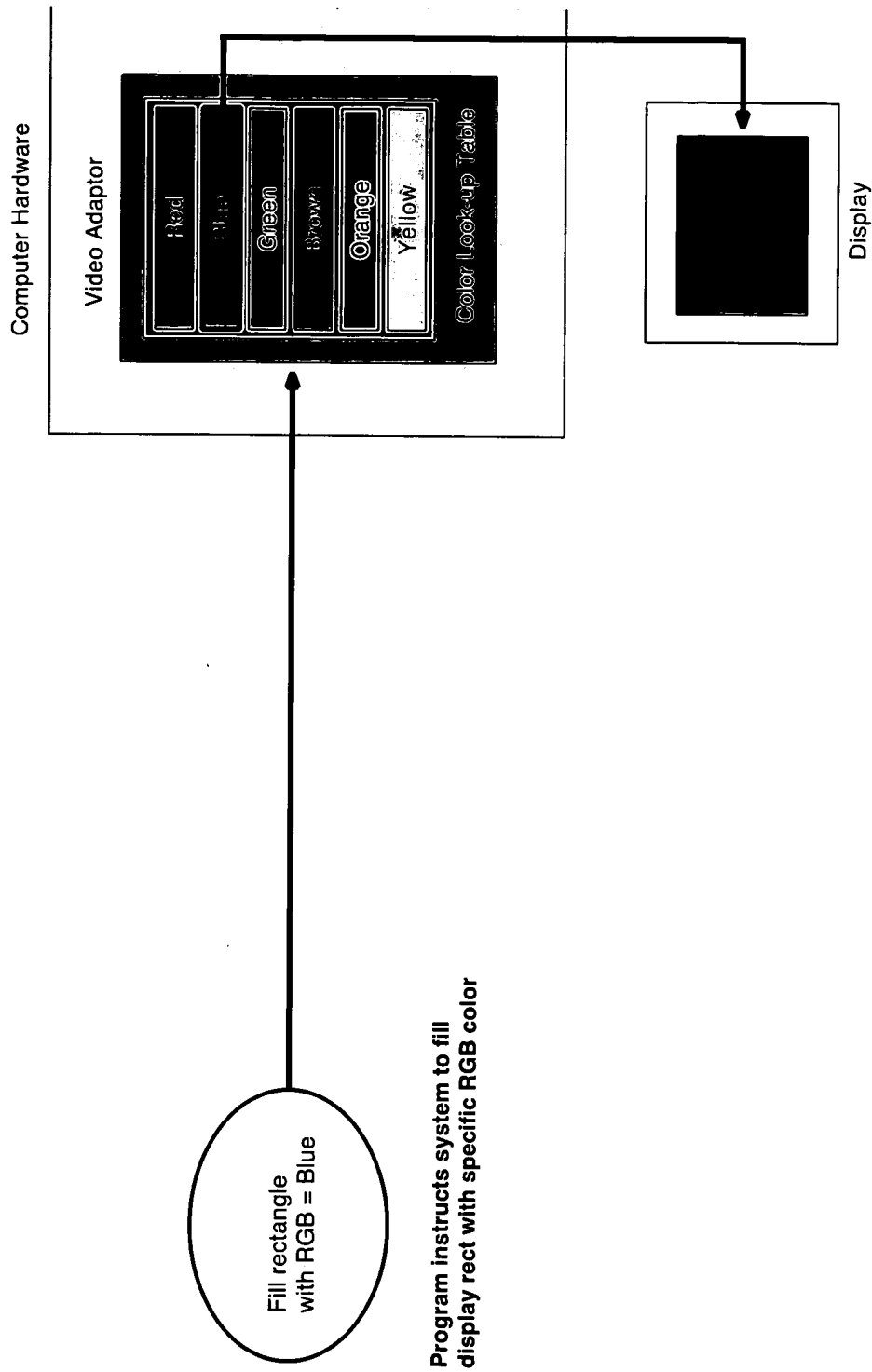
# What is a “palette” according to Woodcock ?

- Palette: In paint programs a collection of drawing tools such as patterns, colors, brush shapes and different line widths from which the user can choose. (Woodcock, page 256, definition 1)



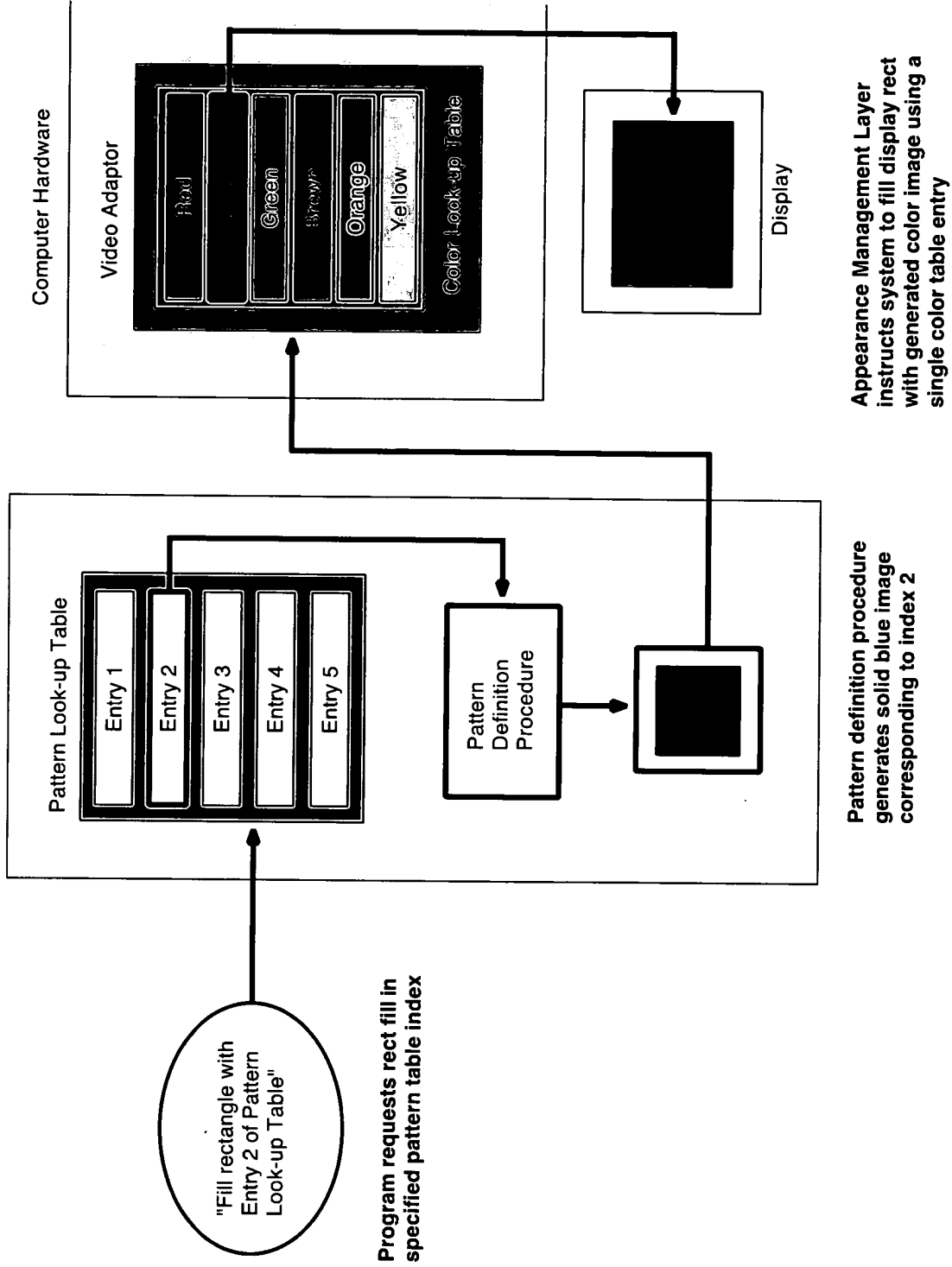
# What is a “palette” according to Woodcock ?

- Palette: “A subset of the color look-up table that establishes the colors that can be displayed on a screen at a particular time. The number of colors in a palette is determined by the number of bits used to represent a pixel. For example, a pixel represented by 4 bits can have one of 16 colors.”
  - Woodcock, pg 256-257 (definition 2)
- Color look-up table: “A table of values each of which corresponds to a different color that can be displayed on a computer’s monitor. This table is an integral part of a computer’s video adapter; the size of the table depends on the type of video adapter.”
  - Woodcock, pg 69
- This is describing a limitation of video cards and display devices at the time. This defines the total set of available colors that can appear onscreen at the **same time**, not the set of colors used in the user interface.

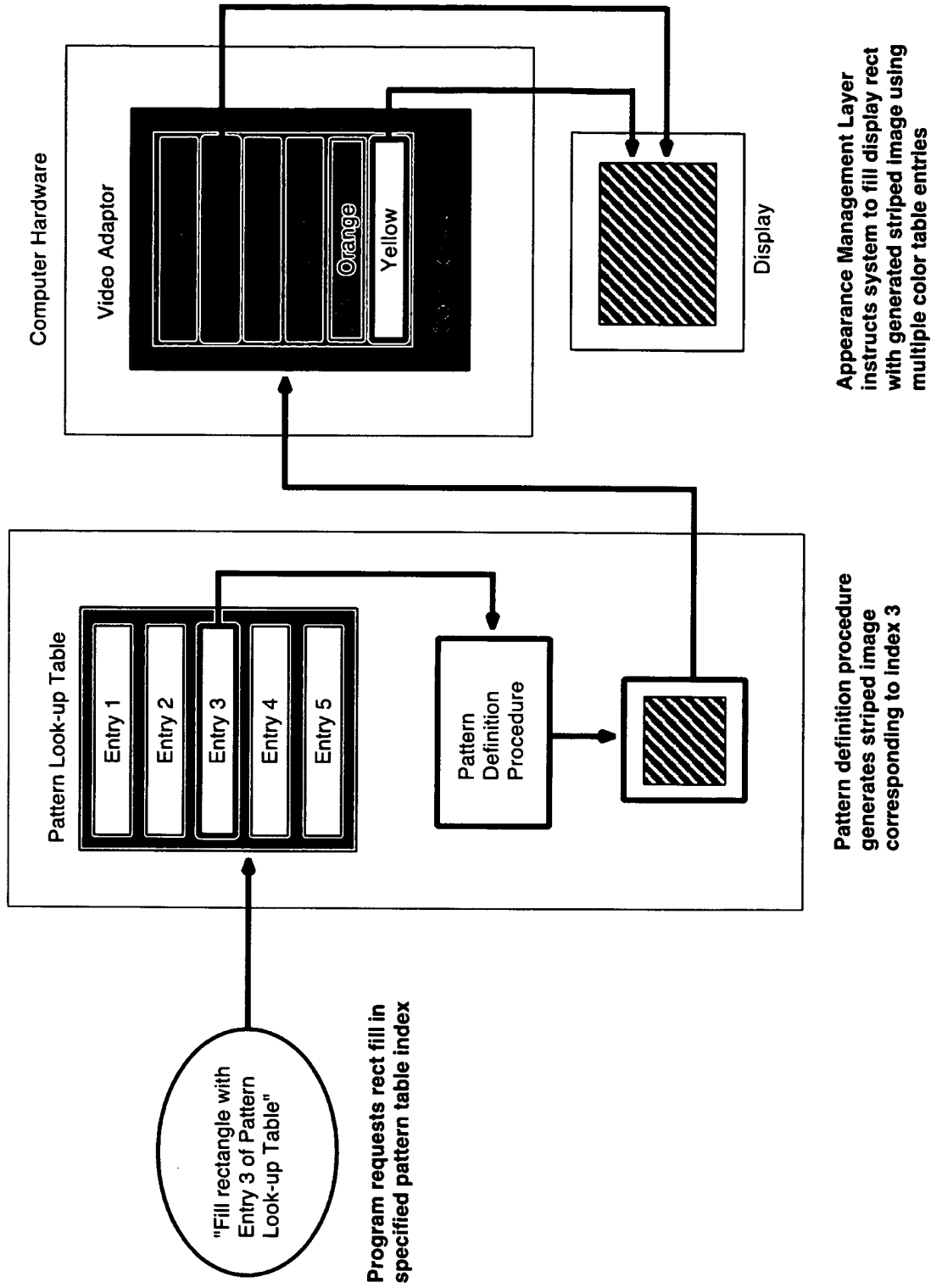


Woodcock: palette = hardware color look-up table





'795 Pattern Tables abstract application from hardware color look-up table



'795 Pattern Tables abstract application may use different image data types and access multiple entries from hardware color look-up table

# 5. Boyce doesn't teach the claimed "command means"

- Boyce doesn't teach methods for commanding the control layer to draw portions of the interface using entries from the set of theme-defined colors and patterns.
  - Boyce doesn't specifically mention how an application would access the colors defined in WIN.INI.

**Table 9.1**  
Color Settings in [colors] section of WIN.INI

Setting	Description
ActiveBorder	Active window border.
ActiveTitle	Active window title bar.
AppWorkSpace	Application work space, such as the background color of the Program Manager window.
Background	The color of the desktop.
ButtonFace	Inactive window borders.
ButtonShadow	Inactive window title bar.
ButtonText	Background color for all menus.
CaptionText	Color of text in all menus.
Scrollbar	Color of horizontal and vertical scrollbars.
WindowFrame	Color of text in the active window title bar.
WindowText	Color of the background for each window, such as the Program Manager window.
WindowText2	Color of all window frames.
WindowText3	Color of text inside a window, such as the color of text in Notepad.

There are also six other settings you can control if you directly edit the WIN.INI file. You cannot set the following six settings from the Control Panel:

Setting	Description
ButtonRise	Color of buttons, such as OK and Cancel.
ButtonShadow2	The shadow color that appears below the right edge of each button.
ButtonText2	The color of text on the face of a button, such as the "OK" on the OK button.
GrayText	Color of commands and options that are not available (disabled).
Highlight	Background color for highlighted text.
HighlightText	Text color of highlighted text.

Boyce win.ini

'795 teaches command means

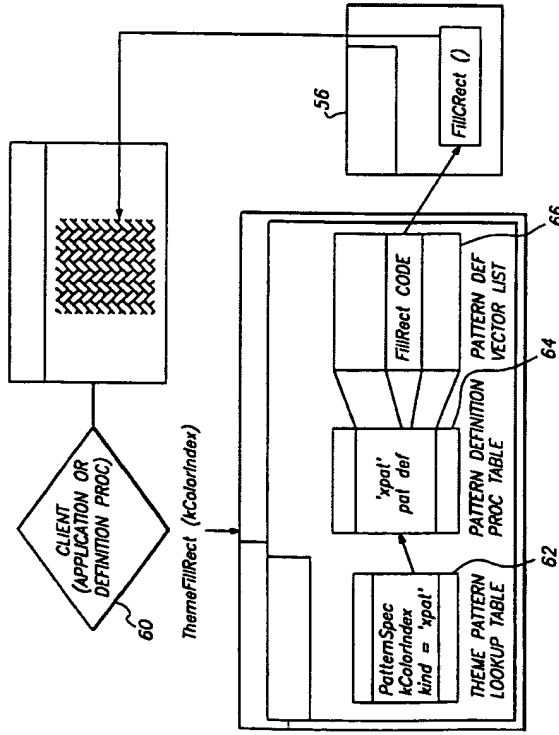


FIG. 9

# ***Conclusion and Summary of Arguments***

## Conclusion

1. Numerous limitations of independent claims 1, 5, 9 & 12 are not taught by Boyce and Woodcock.
2. We explained that the broadest reasonable construction of “themes” defines something beyond what is taught by Boyce’s “color schemes”
3. Therefore, claims 1-12 should be confirmed and a NIRC issued to that effect.

# Questions and Comments