

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DYLAN B. ASHE, ROBERT G. JOHNSTON, JR.
JOSEPH A. RUFF, and DANIEL CLIFFORD

Appeal No. 1998-3134
Application No. 08/437,225

ON BRIEF

Before JERRY SMITH, FLEMING, and BARRY, Administrative Patent Judges.

BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the rejection of claims 1-13. We reverse.

BACKGROUND

The invention at issue in this appeal relates to graphical user interfaces (GUIs) for computers. A conventional GUI can be customized to present appearances

different from the one created by its original designer. With this approach, software developers and users can change the appearance of the graphical elements associated with the GUI. For example, one developer may design an interface with a traditional theme, in which the elements have symmetrical shapes and are displayed with subdued colors, whereas another developer may design an interface with a radical theme, using bright colors and elements of all sizes and shapes. A user can select from among the different available themes.

While the ability to customize the GUI to present different appearance themes enhances the user's experience, it also presents problems regarding the size of memory. More particularly, each theme requires its own set of definitions for each of the elements of the interface. In the aforementioned example, a traditional theme requires software that defines the appearance of windows, menus, and each of the available control objects. Similarly, the radical theme also requires its own set of software which contains a definition

for each graphical element. As more themes are made available to the user, the amount of memory required to store the software for the various themes swells.

In contrast, the appellants' program code for control objects in a GUI is organized as a multi-level hierarchy. At one level of the hierarchy, each different type of control defines a class of objects. The definition of a class includes most, if not all, of the functionality associated with the objects of that class. In addition, the class definition includes the overall structure of the object, such as the relative positions of elements that constitute the object. The actual appearance of the elements is defined by user selectable software that resides at a lower level of the hierarchy. Using this approach, only one instance of the program code which defines the functionality and overall structure of each object is required, which reduces the memory requirements of the program code.

Claim 1, which is representative for our purposes, follows:

1. A graphical user interface for a computer, said interface including graphical objects that are displayed on a monitor of the computer and that are accessed by users to control the operation of the computer, said interface comprising a plurality of definitions stored in a memory that are respectively associated with said graphical objects, each of said definitions stored in said memory comprising a hierarchical set of software code modules, including:

a first code module at one level of the hierarchy which defines the structural relationship of elements that constitute a displayed image of the graphical object; and

a second code module at a lower level of the hierarchy which depends from said first code module, said second code module defining an appearance for each of the elements in the image of the graphical object to be displayed on the monitor.

The reference relied on in rejecting the claims follows:

Southerton, Programmer's Guide to Presentation Manager 205-10 (1989).

Claims 1-13 stands rejected under 35 U.S.C. § 102(a) and (b) as anticipated by, or under 35 U.S.C. § 103 as obvious over, Southerton. Rather than repeat the arguments of the appellants or examiner in toto, we refer the reader to the briefs and answers for the respective details thereof.

OPINION

In deciding this appeal, we considered the subject matter on appeal and the rejections by the examiner. Furthermore, we duly considered the arguments and evidence of the appellants and examiner. After considering the record, we are persuaded that the examiner erred in rejecting claims 1-13. Accordingly, we reverse.

We begin by noting the following principles from Rowe v. Dror, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

A prior art reference anticipates a claim only if the reference discloses, either expressly or inherently, every limitation of the claim. See Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "[A]bsence from the reference of any claimed element negates anticipation." Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

We also note the following principles from In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993).

In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977

F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).... "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

With these principles in mind, we consider the examiner's rejection and the appellants' argument.

The examiner contends, "windows are inherently hierarchical in that windows are invoked from within windows (Southerton p. 205)." (Examiner's Answer at 5.) The appellants argue, "[t]he mere fact that the windows can have a hierarchical relationship to one another does not suggest that the code for drawing those windows should also have a hierarchical architecture." (Reply Br. at 3.)

"In the patentability context, claims are to be given their broadest reasonable interpretations. Moreover, limitations are not to be read into the claims from the specification." In re Van Geuns, 988 F.2d 1181, 1184, 26

USPQ2d 1057, 1059 (Fed. Cir. 1993) (citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Here, claims 1-7 specify in pertinent part the following limitations: "a hierarchical set of software code modules, including: a first code module at one level of the hierarchy which defines the structural relationship of elements that constitute a displayed image of the graphical object; and a second code module at a lower level of the hierarchy which depends from said first code module" Similarly, claims 8-13 specify in pertinent part the following limitations: "a plurality of first code modules stored in a memory, each of which defines the structural relationship of elements that constitute a displayed image of an associated graphical object; a plurality of sets of second code modules stored in a memory, which depend from said first code modules, wherein each set of second code modules includes a code module which depends from a respective one of said first code modules" Giving claims 1-13 their broadest reasonable interpretation, the limitations recite a multi-level hierarchy of code modules including at least one first code module at one level of the

hierarchy and at least one second code module at a lower level of the hierarchy that depends from the first code module.

The examiner fails to show a teaching or suggestion of the limitations in Southerton. "A rejection ... clearly must rest on a factual basis" In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967). "The Patent Office has the initial duty of supplying the factual basis for its rejection. It may not ... resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis." Id., 154 USPQ at 178.

Here, although Southerton may inherently teach a hierarchy, it is not a hierarchy of code modules. To the contrary, the reference merely discloses a hierarchy of windows. The appellants assert, "such a relationship has no bearing upon the architecture of the software code that is used to draw those objects. In a typical programming environment, each of the various windows is drawn by the same code. In essence, each window constitutes a separate instantiation of that code." (Reply Br. at 2-3.) Rather than

contesting the assertion, the examiner states, "no further responses ... is deemed necessary." (Supp. Examiner's Answer at 2.) Furthermore, the examiner fails to explain the relevance of Southerton's hierarchy of windows to the claimed hierarchy of code modules.

Because Southerton merely teaches a hierarchy of windows, we are not persuaded that the reference discloses or would have suggested the limitations of "a hierarchical set of software code modules, including: a first code module at one level of the hierarchy which defines the structural relationship of elements that constitute a displayed image of the graphical object; and a second code module at a lower level of the hierarchy which depends from said first code module" or "a plurality of first code modules stored in a memory, each of which defines the structural relationship of elements that constitute a displayed image of an associated graphical object; a plurality of sets of second code modules stored in a memory, which depend from said first code modules, wherein each set of second code modules includes a code module which depends from a respective one of said first code modules

...." Therefore, we reverse the rejection of claims 1-13 as anticipated by, or as obvious over, Southerton.

CONCLUSION

In summary, the rejection of claims 1-13 under 35 U.S.C. § 102(a) and (b), or under 35 U.S.C. § 103, is reversed.

REVERSED

JERRY SMITH)	
Administrative Patent Judge)	
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