

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BARRY O'ROURKE

Appeal No. 1996-0951
Application No. 07/880,793¹

ON BRIEF

Before KRASS, FLEMING, and BARRY, Administrative Patent Judges.
BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the final rejection of claims 1, 2, 4, and 20-22. The appellant filed an amendment after final rejection on April 3, 1995, which was denied entry. He filed another amendment after final rejection on April 24, 1995, which was entered. We reverse.

¹ The application was filed on May 8, 1992.

BACKGROUND

The invention at issue in this appeal is a software tool for generating computer code in a message-based environment. A user interacts with the tool, making selections to define a graphical user interface (GUI). When the selections are completed, the tool begins the process of defining connections between GUI code and functional code. It analyzes the GUI definition and displays a list of all messages that could be produced thereby. On the same display, the tool lists blocks of code from a code library. The user selects a message and a block of code to be invoked by the message. If the code block has any prerequisite requirements, the user is prompted to meet them. A message identifier, a pointer to the code block, and any prerequisite data are then stored in a linked list structure. Once the connections are defined, the tool generates code for producing the defined GUI.

Claim 20, which is representative for our purposes, follows:

20. A method for designing a graphical user interface and generating a program to implement user selections from said user interface, said method comprising the steps of:
- storing a multiplicity of program code blocks corresponding to respective functions;
- displaying a multiplicity of graphical features and receiving designer selections of a plurality of said features for inclusion in said user interface;
- displaying for each of said plurality of features a list of messages for said each feature and displaying for each of the listed messages a list of the functions which are consistent with said each message;
- in response to designer selection of one of the listed messages and one of the listed functions for said each feature, generating a program based on the program code block corresponding to said one function to implement said one function upon user selection of said each feature;
- displaying said one message in conjunction with said each feature in said user interface; and
- user selecting of features from said user interface.

The reference relied on by the patent examiner in rejecting the claims follows:

Kodosky et al.

4,914,568

Apr. 3, 1990.

Claims 1, 2, 4, and 20-22 stand rejected under 35 U.S.C. § 112 as indefinite. The claims also stand rejected under 35 U.S.C. § 102(e) as anticipated by Kodosky. Rather than repeat the arguments of the appellant or examiner in toto, we refer the reader to the brief and the answer for the respective details thereof.

OPINION

In reaching our decision in this appeal, we considered the subject matter on appeal and the rejections and evidence advanced by the examiner. We also considered the arguments of the appellant and examiner. After considering the record before us, we cannot say that claims 1, 2, 4, and 20-22 do not particularly point out and distinctly claim the subject matter regarded as the invention. We also cannot say that the evidence anticipates the invention of the claims. Accordingly, we reverse. Our opinion discusses the definiteness and novelty of the claims seriatim.

Definiteness of Claims 1, 2, 4, and 20-22

Regarding the definiteness of claims 1, 2, 4, and 20-22, the appellant argues, "the term 'message' should be interpreted as human language words such as words of text" (Appeal Br. at 5.) In response, the examiner opines, "[i]t is not clear just what is claimed in regard to 'message'." (Examiner's Answer at 5.)

We cannot find that the claims do not particularly point out and distinctly claim the limitation of "messages." The test for the definiteness of a claim is whether one skilled in the art would understand the bounds of the claim when read in light of the specification. If the claim read in light of the specification would reasonably apprise one so skilled of the scope of the invention, 35 U.S.C. § 112 demands no more. Miles Labs., Inc. v. Shandon Inc., 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed. Cir. 1993).

Here, the specification describes messages as follows.

The message list contains only the relevant messages for the particular feature (window/control etc.) which has been selected. If the currently selected item is a window the messages relating to windows (WM_****) are added to the list.

Accordingly, these messages 34 are added to the list of messages 32 illustrated in Figure 2.

When all the features of the user interface have been analyzed the complete list of possible messages 32 will have been assembled. The system displays with this the list of blocks of code that are stored in the library and may be connected to the messages. (Spec. at 6-7.)

Figure 2 illustrates the structure of a list of messages 32. Each message comprises a prefix and a suffix. The prefix, "WM_," indicates that the message relates to windows. (Spec. at 7.) The suffix is at least one word or an abbreviation thereof, e.g., "ACTIVATE," "BUTTON1DOWN," which indicates a function. (Fig. 2.)

When read in light of the specification, we find that one skilled in the art would understand the meaning of messages. Therefore, one skilled in the art would understand the bounds of the claimed messages. We demand no more. Therefore, we reverse the rejection of claims 1, 2, 4, and 20-22 under 35 U.S.C. § 112. Next, we consider the novelty of the claims.

Novelty of Claims 1, 2, 4, and 20-22

Regarding the novelty of claims 1, 2, 4, and 20-22, the appellant argues, "nor do Kodosky et al. disclose a technique for defining a user interface and associated messages and generating a program which implements user selections from the user interface." (Appeal Br. at 6.) In response the examiner states that he "does not understand precisely where Kodosky fails in this regard." (Examiner's Answer at 10.)

We cannot find that Kodosky teaches the messages of claims 1 and 20. A prior art reference anticipates a claim only if the reference discloses expressly or inherently every limitation of the claim. Absence from the reference of any claimed element negates anticipation. Rowe v. Dror, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

Claims 1 and 20 recite in pertinent part "displaying for each of said plurality of features a list of messages for said each feature and displaying for each of the listed messages a list of the functions which are consistent with said each message" and "designer selection of one of the listed messages and one of the listed functions for said each feature"

In short, the claims specify that a computer displays a list of messages that could be produced by a GUI feature selected by a user, and the user then selecting a message therefrom.

Kodosky discloses a computer tool for modeling a process graphically. Col. 49, ll. 6-8. Icons that reference modular procedural units are stored in a memory library. Col. 9, ll. 27-31. A user selects and connects icons to build a diagram of a process on the screen of a computer. Col. 3, ll. 47-55; col. 49, ll. 14-18. The computer creates an execution procedure that corresponds to the depicted process. The user then assigns values for the input variables of the process. The computer executes the procedure to produce values for the output variables of the process. Col. 3, ll. 56-64.

The examiner failed to identify any teaching of determining and displaying a list of messages that could be produced by a GUI feature or selecting a message therefrom. After a user completes his diagram of a process by selecting and connecting icons, Kodosky's computer creates code that corresponds to the diagram. In contrast to the claimed

invention, the reference omits an intermediate step of displaying and selecting messages.

The examiner erred in reading the claimed limitations on Kodosky's icons. We appreciate the Examiner's explanation that procedures represented by icons may exchange data representing voltage changes or levels. (Examiner's Answer at 8.) This exchange, however, does not amount to determining and displaying a list of messages that could be produced by a GUI feature and selecting a message therefrom.

For the foregoing reasons, we cannot find that Kodosky teaches the claimed messages. The absence of the claimed element from the reference negates anticipation. Therefore, we reverse the rejection of claims 1, 2, 4, and 20-22 under 35 U.S.C. § 102.

CONCLUSION

To summarize, the examiner's rejection of claims 1, 2, 4, and 20-22 under § 112 is reversed. His rejection of the claims under 35 U.S.C. § 102(e) is also reversed.

REVERSED

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| Administrative Patent Judge |) | |
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| Administrative Patent Judge |) | AND |
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