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for publication and is not binding precedent of the Board.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. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte MICHELLE EWELL
and
BERYL HAMILTON HORTON

Appeal No. 2003-2076
Application No. 09/428,364

ON BRIEF

Before ABRAMS, STAAB, and NASE, Administrative Patent Judges.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 20, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to computer systems and, more particularly, to an arrangement for marking computer system components and documentation to guide a user in installing or setting up the computer system. The appellants' invention also includes a method for marking computer system components and documentation to guide system installation (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Crane, Jr. (Crane)	5,661,631	Aug. 26, 1997
Scholder et al. (Scholder)	5,822,182	Oct. 13, 1998

Amiga Vision Authoring System manual, Commodore Electronics, Chapter 6 (Commodore)

Claims 1 to 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Scholder in view of Crane and Commodore.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the final rejection (Paper No. 19, mailed July 17, 2002) and the answer (Paper No. 22, mailed February 25, 2003) for the examiner's complete reasoning in support of the rejection,

and to the brief (Paper No. 21, filed November 25, 2002) and reply brief (Paper No. 23, filed April 25, 2003) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 to 20 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claims 1, 9 and 17, the only independent claims on appeal, read as follows:

1. A computer system and installation documentation arrangement comprising:

(a) a computer system housing having a plurality of system connectors;

(b) a plurality of external devices, each respective external device having an external connector adapted to connect with a different one of the system connectors;

(c) a plurality of installation code elements, each respective installation code element being associated with a different one of the system connectors, the respective installation code element marking the respective system connector with which the code element is associated, and also marking the respective external connector adapted to connect with the respective system connector; and

(d) installation documentation having a plurality of information sections, each information section containing information pertaining to making the desired connection between one of the system connectors and the respective external connector, each information section also being marked with a section identifying heading that includes the installation code element which marks the respective system connector and respective external connector to which the information section pertains.

9. In a computer system having a system housing and a plurality of external devices, each external device having a respective external connector adapted to make a connection with a particular system connector associated with the system housing, an installation guide arrangement comprising:

(a) a plurality of installation code elements, each respective installation code element being associated with a different one of the system connectors, the respective installation code element marking the respective system connector with which the code element is associated, and also marking the respective external connector adapted to connect with the respective system connector; and

(b) installation documentation having a plurality of information sections, each information section containing information pertaining to making the desired connection between one of -the system connectors and the respective external connector, each information section also being marked with a section identifying heading that includes the installation code element which marks the respective system connector and respective external connector to which the information section pertains.

17. A method of marking computer system components and related documentation to facilitate installation, the computer system components including a system housing having a plurality of system connectors and also including a plurality of external devices, each external device having an external connector adapted to make a connection with a particular one of the system connectors, the documentation including a plurality of information. sections with each different section containing information pertaining to making the connection between a particular system connector and the respective external connector, and the method comprising the steps of:

(a) marking each system connector with a different installation code element;

(b) marking each respective external connector with the respective installation code element which marks the respective system connector with which the respective external connector is adapted to connect; and

(c) labeling each information section with a section identifying heading that includes the respective installation code element which marks the respective system connector and respective external connector to which the information section pertains.

Scholder's invention relates generally to computer chassis and, more particularly, to a flexible I/O port configuration and connector labeling scheme for a computer chassis. Figure 4 is a rear plan view of the computer chassis 10 of Figure 1 after the computer system motherboard 200 of Figure 2 has been installed therein. The system motherboard 200 includes various "standard" connectors, such as a parallel port connector 203, a serial port connector 204, a VGA connector 205, a mouse connector 206, a keyboard connector 207, and audio connectors 208, as well as additional connectors 209, which may be, for example, a USB connector and a network connector. As shown in Figures 5 and 6, a flexible I/O label strip 500 is provided for identifying the various connectors of a particular computer system. In a preferred

embodiment, the strip 500 is a molded strip of plastic having icons printed thereon for identifying respective ones of the connectors provided on the computer system. An alignment code 502, which in the illustrated embodiment includes three dots in a vertical arrangement, is provided on the strip 500 for enabling an assembler to apply the strip 500 to the chassis 10 by aligning the alignment code 502 with a corresponding alignment code 504 stamped on the I/O shield 210 and displayed through an unused or partially used cutout, such as a cutout 26. The label strip 500 is secured to the chassis 10 by inserting tabs 600 provided at opposite ends of the strip into slots 602 in the chassis 10. Once the tabs 600 have been inserted in to the slots 602, a plurality of posts 604 are pressed into corresponding holes 606 provided in the chassis 10.

Crane's invention relates to a structure of a computer system, and specifically to an arrangement of elements in a computer system to optimize desktop space and to facilitate cooling, shielding, use, access, upgrade, and repair of the computer system. Figure 8 is a partial perspective view of a color code scheme and hinge arrangement associated with the desktop unit of the computer system in which a hinged drive section provides access to one or more of the printed circuit boards. Printed circuit boards (PCBs) 132 are housed within card cage section 130. The PCBs may include, for example, at least one microprocessor card having a microprocessor

secured thereto, at least one memory card, and at least one peripheral controller card.

Crane teaches (column 7, line 35, to column 8, line 37) that:

> The PCBs are arranged vertically with the cable connections for externally accessible cables (I/O cables) located at the back of card cage section 130 where they may be easily accessed by the user. A unique aspect of the design of the card cage is that the function of the individual PCBs is depicted by a color code. More particularly, each of the individual printed circuit cards is manufactured in a different color material rather than adopting the traditional method of making each card green. As an alternative to manufacturing each of the cards in a different color material, or in addition to such manufacture, each of the cards may have text printed on the card identifying the particular color assigned to that card. The color code for each card is reflected in the user documentation and also in one or more information labels attached within DTU 100 (e.g., within the card cage). The purpose of this is to clearly identify in an unambiguous way the location of cards relative to their intended location. In this manner, errors in service due to cards being inserted into wrong locations is, for all practical purposes, eliminated.
>
> An exemplary embodiment of the color code scheme of the present invention will now be discussed with reference to FIG. 8. In the position depicted in FIG. 8, DASD section 140 is pivoted open to provide access to a plurality (e.g., seven) of PCBs 132 housed within card cage section 130. The plurality of PCBs 132 may include, for example, a microprocessor board containing a microprocessor, a memory board, and a peripheral controller board. It should be understood that, although FIG. 8 shows seven PCBs, any number of PCBs may be included in the computer system in accordance with the invention.
>
> Each of the PCBs 132 may have a different color and/or text written thereon identifying the color associated with that PCB. Additionally, a card color code label 133 is provided in visual proximity with respect to PCBs 132 (for example, inside the top of the card cage adjacent the cards). Label 133 identifies a one-to-one correspondence between the slots of the card cage in which the PCBs 132 reside and the colors associated with the PCBs. For example, label 133 may include a plurality of colored squares with the leftmost square being the color assigned to the leftmost slot, the second leftmost square being the color assigned to the second leftmost slot, and so on. The color of each card 132 matches the color of the slot in which it should reside. Thus, when a PCB 132 having a given color is to be replaced, either for repair or upgrade purposes, the

> PCB is removed and the slot into which the replacement board (which also has the given color) is to be inserted is determined by matching the given color of the replacement board with one of the colored squares on label 133, and then inserting the replacement board into the slot corresponding to the one of the colored squares having the given color. As an example of the colors which may be assigned to the boards, the microprocessor board may be red, the memory board may be white, and the peripheral controller board may be blue.
>
> In another embodiment, each of PCBs 132 may include a graphic symbol (such as a heart, a diamond, a spade, or the like) printed thereon in addition to being designated by one or more of the aforementioned color indicia. This would be useful in cases where, for example, the red microprocessor board produced by a first manufacturer is not a suitable replacement for the red microprocessor board produced by a second manufacturer. By making sure that each replacement board matches the board it is replacing in both color and graphic symbol, the user can avoid erroneous board replacements which, of course, are undesirable. The graphic symbol may be used to represent the manufacturer and/or the version of a given board, and if the color and graphic symbol of one board do not match the color and graphic symbol of another board, respectively, then such boards are not suitable replacements for one another.

Commodore discloses a software manual having a plurality of information sections containing information pertaining the software. Some of the information section are marked with a section identifying heading that includes the software icon to which the information section pertains.

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Scholder and claims 1, 9 and 17, it is our opinion that the differences are: (1) a plurality of installation code elements also marking the respective external connector adapted to connect with the respective system connector as recited in claims 1 and 9; (2) installation documentation having a plurality of information sections, each information section containing information pertaining to making the desired connection between one of the system connectors and the respective external connector, each information section also being marked with a section identifying heading that includes the installation code element which marks the respective system connector and respective external connector to which the information section pertains as recited in claims 1 and 9; (3) marking each respective external connector with the respective installation code element which marks the respective system connector with which the respective external connector is adapted to connect as recited in claim 17; and (4) labeling each information section of the documentation containing information pertaining to making the connection between a particular system connector and the respective external connector with a section identifying heading that includes the respective installation code element which marks the respective system connector and respective external connector to which the information section pertains as recited in claim 17.

With regard to these differences, the examiner determined (final rejection, pp. 3-5) that it would have been obvious to a person of ordinary skill in the art to (1) include with the system of Scholder documentation with installation code element labels that also appear on the connectors as suggested by Crane, and (2) include the section identifying headings of Commodore with the computer system of Scholder as modified by Crane.

The appellants argue that the applied prior art does not suggest each information section in the installation documentation being marked with a section identifying heading that includes the installation code element which marks the respective system connector and respective external connector to which the information section pertains. We agree. In that regard, it is our opinion that the applied prior art does not suggest having the plurality of installation code elements which mark the plurality of system connectors also mark the respective external connector adapted to connect with the respective system connector let alone that each information section of the installation documentation containing information pertaining to making the desired connection between one of the system connectors and the respective external connector also being marked with the installation code element which marks the respective system connector and respective external connector to which the information section pertains.

In our view, the only suggestion for modifying Scholder in the manner proposed by the examiner to meet the above-noted limitations stems from hindsight knowledge derived from the appellants' own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is, of course, impermissible. See, for example, W. L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

For the reasons set forth above, the decision of the examiner to reject independent claims 1, 9 and 17, and claims 2 to 8, 10 to 16 and 18 to 20 dependent thereon, under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 20 under 35 U.S.C. § 103 is reversed.

REVERSED

NEAL E. ABRAMS Administrative Patent Judge	)	
LAWRENCE J. STAAB Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JEFFREY V. NASE Administrative Patent Judge	)	

SHAFFER & CULBERTSON, L.L.P.
1114 LOST CREEK BLVD.
SUITE 420
AUSTIN, TX 78746

JVN/jg