

## GENERATION OF A COMPATIBLE ORDER FOR A COMPUTER SYSTEM

### BACKGROUND OF THE INVENTION

#### CROSS-REFERENCE TO RELATED APPLICATIONS

This application relates to co-pending U.S. patent application Ser. No. 08/921,438, filed on Aug. 29, 1997, entitled "Database for Facilitating Software Installation and Testing for a Build-To-Order Computer System" and naming Richard D. Amberg, Roger W. Wong, and Michael A. Brundridge as inventors, the application being incorporated herein by reference in its entirety.

This application relates to co-pending U.S. patent application Ser. No. 08/920,773, filed on Aug. 29, 1997, entitled "Software Installation and Testing for a Build-To-Order Computer System" and naming Richard D. Amberg, Roger W. Wong, and Michael A. Brundridge as inventors, the application being incorporated herein by reference in its entirety.

This application relates to co-pending U.S. patent application Ser. No. 08/919,959, filed on Aug. 29, 1997, entitled "Software Installation and Testing for a Build-To-Order Computer System" and naming Richard D. Amberg, Roger W. Wong, and Michael A. Brundridge as inventors, the application being incorporated herein by reference in its entirety.

### FIELD OF THE INVENTION

The present invention relates to computer systems in general, and more particularly to generating a compatible order for a build-to-order computer system.

### DESCRIPTION OF THE RELATED ART

Computer systems are information handling systems which can be designed to give independent computing power to one user or a plurality of users. Computer systems may be found in many forms including, for example, mainframes, minicomputers, workstations, servers, personal computers, internet terminals, notebooks, and embedded systems. Personal computer (PC) systems, such as the International Business Machines (IBM) compatible PC systems, include desk top, floor standing, or portable versions. A typical PC system includes such hardware components as a processor, associated memory such as a RAM, control logic, and a number of peripheral devices that provide input and output for the system. Such peripheral devices often include floppy and hard disk drives, CD-ROM drives, network capability cards, terminal devices, modems, sound devices, voice recognition devices, electronic pen devices, and other mass storage devices such as tape drives and DVDs.

It has been known to install software programs and to perform tests on computer systems before they are shipped to businesses or individual customers. The goal of software installation and testing is to efficiently produce a useful, reliable computer system which may be delivered to businesses and individuals free from errors and ready to run. In general, testing detects and analyzes errors that occur in both the hardware and software portions of the computer system. A partial list of computer system hardware tests might include diagnostics upon hardware components such as a processor, memory, a storage device, an audio device, a graphics device, a keyboard, a mouse, and a printer. Soft-

ware installation often includes loading a desired package of software programs onto the computer system, preparing appropriate environment variables for the computer, and preparing appropriate initialization files for the loaded software programs. Software testing often includes making sure that a desired version of software programs has been installed onto the computer system and that appropriate drivers are present on the computer system.

It has been known to specify software programs to be installed on a computer system. A computer file can be generated to indicate the software programs chosen or selected. Typically, the generated file is checked by a program or programs to determine whether the selected software programs for the targeted computer system are compatible. If the selected programs are incompatible, the program returns an error which requires the generation of a new file. Such a system adds to the inconvenience of ordering and specifying a computer system.

### SUMMARY

It has been discovered that presenting to a user a list of options compatible with a previous choice made by user advantageously enables a system for specifying software programs and hardware components for a computer system to write to a compatible data file an indication of those selections.

In one aspect, the invention includes a method for specifying a computer system. The method includes presenting to a user via a user interface a list of a first plurality of options that may be implemented on a computer system and receiving an indication of a selected choice by a user from the first plurality of options presented to the user via the user interface. The method also includes generating a list of a second plurality of options that may be implemented on a computer system. Each of the second plurality of options is compatible with the selected choice. The method further includes presenting to the user via the user interface, the list of the second plurality of options.

In another aspect of the invention, a computer system includes a processor and a memory operably coupled to the processor. The memory includes a software program installed thereon. The software program is selected to be installed from a list of options. Each option of the list is compatible with an operating system installed on the memory. The operating system is selected previous to the selection of the software program. The list is generated by accessing a computer system readable data base which includes a plurality of entries. The data base includes an entry for each option of the list. The entry for each option of the list includes an indication of compatibility with the selected operating system.

In another aspect of the invention, a method for specifying a computer system includes providing to a user interface a first list of options, receiving from the user interface an indication of a selected choice from the first list of options presented to the user via the user interface, and generating a second list of options. The generating includes accessing a computer system readable data base. Each option of the second list is compatible with the selected choice. The method also includes providing to the user interface the second list of options and receiving from the user interface an indication of at least one selected choice from the second list of options presented to the user via the user interface. The method further includes writing to a computer readable data file an indication of the selected choice from the first list and writing to a computer readable data file an indication of the at least one selected choice from the second list.