

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEPHEN R. CORNABY and TRACY D. HARMER

Appeal No. 1999-2412
Application No. 08/553,024

HEARD: August 15, 2001

Before KRASS, BARRETT and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-57, all of the pending claims.

The invention is directed to the operation of a mass memory storage peripheral computer device, such as a hard disk drive connected to a host computer. More particularly, whereas the conventional approach was to store a loadable device driver in a separate ROM IC, requiring updates of the loadable device driver within ROM to be

performed by disassembling the device in order to replace the expansion BIOS ROM, the present invention stores the loadable device driver in the memory storage of the mass memory storage device so that the loadable device driver may be easily updated by simply transferring an updated version of the loadable device driver into the mass memory storage of the mass memory storage device.

Representative independent claim 1 is reproduced as follows:

1. In a computer system including a host computer which is operated using a particular operating system and a system BIOS, the computer system having system RAM associated with the host computer and a mass memory storage peripheral computer device which is connected to the host computer using a peripheral bus in which relocatable expansion BIOS location addresses are allowed, an arrangement for allowing the host computer to operate the mass memory storage peripheral computer device, the arrangement comprising:

a) a loadable device driver including data address translating means for translating data address information communicated between the operating system and the mass memory storage peripheral computer device; and

b) means for loading the loadable device driver into the system RAM during the start-up of the system for use during the operation of the system

(i) such that the loadable device driver is in communication with the operating system in a way which does not require the system BIOS, any protocol translation, or any other type of data address translation mechanism to be provided between the loadable device driver and the operating system in order for the loadable device driver to communicate with the operating system and

Appeal No. 1999-2412
Application No. 08/553,024

(ii) such that the loadable device driver is in communication with the mass memory storage peripheral computer device through the peripheral bus in a way which does not require the system BIOS, any protocol translation, or any other type of data address translation mechanism to be provided between the loadable device driver and the mass memory storage device in order for the loadable device driver to communicate with the mass memory storage device.

The examiner relies on the following reference:

Willman et al. (Willman) 5,363,487 Nov. 08, 1994

In addition, the examiner relies on admitted prior art [APA] which comprises pages 1-7 of the specification, describing the background of the art, and Figures 1, 2A and 2B.

Claims 40-57 stand rejected under 35 U.S.C. § 102(b) as anticipated by APA.

Claims 1-39 stand rejected under 35 U.S.C. § 103 as unpatentable over APA in view of Willman.

Reference is made to the brief and answer for the respective positions of appellants and the examiner.

OPINION

In applying APA against claims 40-57, the examiner recognizes that APA discloses loading the operating parameters of a particular peripheral computer device in a RAM of the peripheral device while the instant invention loads the operating

parameters associated with the peripheral computer device into the system RAM.

However, it is the examiner's view that the claim language is of such breadth as to read on APA. In particular, it is the examiner's contention that this distinction is not brought out in the instant claim language. The examiner contends [answer-page 12, lines 8-10] that there is "no mention in the claim language that the system RAM or any RAM device is confined to the host computer." We disagree.

Each of independent claims 40, 47 and 54 recites "a host computer having a system RAM" and "loading operating parameters...into the system RAM." Thus, it is very clear in the instant claim language that the RAM into which the operating parameters of the peripheral computer device are loaded is located in the host computer. Since this is clearly not the case in APA which is directed to loading and storing the operating parameters in memory at the peripheral device, we will not sustain the rejection of claims 40-57 under 35 U.S.C. § 102(b) as anticipated by APA.

We turn now to the rejection of claims 1-39 under 35 U.S.C. § 103 as unpatentable over APA in view of Willman.

It is the examiner's position that APA discloses the claimed subject matter but for the claimed loadable driver, translating means between the operating system and mass memory and not requiring any BIOS or any other type of translation mechanism

Appeal No. 1999-2412
Application No. 08/553,024

between the loadable device driver and the operating system for communication. The examiner applies Willman for these teachings and holds that it would have been obvious to use the system of Willman in APA “because it would enhance an efficient method of communicating with peripheral devices” [answer-page 7].

We will not sustain the rejection of claims 1-39 under 35 U.S.C. § 103.

Each of independent claims 1, 16, 31, 34 and 35 requires, in one form or another, a loadable device driver which includes data address translating means for translating data address information communicated between the operating system and the mass memory storage peripheral computer device and the loading of the loadable device driver into the system RAM during start-up of the system wherein the communication of the loadable device driver with the operating system is such that it does not require the system BIOS, any protocol translation, or any other type of data address translation mechanism.

The examiner identifies the file system driver (FSD) of Willman as being analogous to the claimed loadable device driver and this would appear to be a fair assessment as far as the FSD being a loadable driver. As explained at column 5 of Willman, at lines 15-26, the FSD may be updated without requiring modification of the operating system kernel so the FSD would appear to be loadable. While Willman is not

Appeal No. 1999-2412
Application No. 08/553,024

clear as to whether the FSD is loadable at the start-up of the system, it would appear obvious that this would be the time to load the FSD as most drivers would be loadable during start-up.

However, Willman mentions nothing about the FSD including data address translating means for translating data address information communicated between the operating system and the mass memory storage peripheral computer device. Willman also discloses nothing regarding the communication of the loadable device driver with the operating system being such that it does not require the system BIOS, any protocol translation, or any other type of data address translation mechanism, as claimed. In order to arrive at such a finding, we would need to resort to unsupported speculation which is improper under 35 U.S.C. § 103.

Accordingly, the examiner has not established a prima facie case of obviousness with regard to the subject matter of claims 1-39 and we will not sustain the rejection of these claims under 35 U.S.C. § 103.

Appeal No. 1999-2412
Application No. 08/553,024

We have not sustained either the rejection of claims 40-57 under 35 U.S.C. § 102(b) or the rejection of claims 1-39 under 35 U.S.C. § 103.

Accordingly, the examiner's decision is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
LEE E. BARRETT)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
ANITA PELLMAN GROSS)	
Administrative Patent Judge)	

eak/vsh

Appeal No. 1999-2412
Application No. 08/553,024

W. DANIEL SWAYZE, JR.
TEXAS INSTRUMENTS, INC.
P.O. BOX 655474
MS 3999
DALLAS, TX 75265