

Docket No.: 31436/43994  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

---

In re Patent Application of:  
Michael Tasler

Application No.: 11/467,073

Confirmation No.: 3012

Filed: August 24, 2006

Art Unit: 2181

For: ANALOG DATA GENERATING AND  
PROCESSING DEVICE HAVING A MULTI-  
USE AUTOMATIC PROCESSOR (as  
amended)

---

Examiner: C. K. Lee

**AMENDMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INTRODUCTORY COMMENTS**

Please enter this amendment in response to the Office Action mailed from the USPTO on February 24, 2009. A petition and fee for a three-month extension of time are filed herewith.

**Amendments to the Title and the Drawings** are on page 2 of this paper.

**Amendments to the Specification** start on page 2 of this paper.

**The Listing of the Claims** begins on page 8 of this paper.

**Remarks/Arguments** begin on page 21 of this paper.

Application No. 11/467,073  
Amendment  
Date August 13, 2009

Docket No.: 31436/43994

**Amendment To The Title:**

Please amend the title of this application to read as follows: Analog Data Generating And Processing Device Having A Multi-Use Automatic Processor.

**Amendment To The Drawings:**

Replacement drawings are submitted herewith to add a lead line in Figure 2 from number 1260 to the EPP box as noted in the Office Action. Approval of the replacement drawings is earnestly solicited.

**Amendments To The Specification:**

1. Replace paragraph [0001] of the specification in its entirety with the following paragraph:

[0001] This application is a continuation of application Ser. No. 11/078,778, filed March 11, 2005, now ~~currently pending~~ expressly abandoned, which is a continuation of application Ser. No. 10/219,105, filed August 15, 2002, now Pat. No. 6,895,449, which is a divisional of application Ser. No. 09/331,002, filed Jun. 14, 1999, now Pat. No. 6,470,399.

2. Replace paragraph [0009] of the specification in its entirety with the following paragraph:

[0009] A solution to this problem is offered by the interface devices of IOtech (business address: 25971 Cannon Road, Cleveland, Ohio 44146, USA) which are suitable for laptops such as the WaveBook/512 (registered trademark). The interface devices are connected by means of a plug-in card, approximately the size of a credit card, to the PCMCIA personal computer memory card association (PCMCIA) interface which is now a standard feature in laptops. The plug-in card converts the PCMCIA interface into an interface known in the art

as ~~IEEE~~Institute of Electrical and Electronics (IEEE) 1284. The said plug-in card provides a special printer interface which is enhanced as regards the data transfer rate and delivers a data transfer rate of approximately 2 MBps as compared with a rate of approx. 1 MBps for known printer interfaces. The known interface device generally consists of a driver component, a digital signal processor, a buffer and a hardware module which terminates in a connector to which the device whose data is to be acquired is attached. The driver component is attached directly to the enhanced printer interface thus permitting the known interface device to establish a connection between a computer and the device whose data is to be acquired.

3. Replace paragraph [0013] of the specification in its entirety with the following paragraph:

[0013] The specialist publication IBM Technical Disclosure Bulletin, Vol. 38, No. 05, page 245; "Communication Method between Devices through FDD Interface" discloses an interface which connects a host device to a peripheral device via a floppy disk drive interface. The interface consists in particular of an address generator, an ~~MFM~~modified frequency modulation (MFM) encoder/decoder, a serial/parallel adapter and a format signal generator. The interface makes it possible to attach not only a floppy disk drive (FDD) but also a further peripheral device to the FDD host controller of a host device. The host device assumes that a floppy disk drive is always attached to its floppy disk drive controller and communication is initiated if the address is correct. However, this document contains no information as to how communication should be possible if the interface is connected to a multi-purpose interface instead of to a floppy disk drive controller.

4. Replace paragraph [0015] of the specification in its entirety with the following paragraph:

[0015] The present invention is based on the finding that both a high data transfer rate and host device-independent use can be achieved if a driver for an input/output device customary in a host device, normally present in most commercially available host devices, is utilized. Drivers for input/output devices customary in a host device which are found in

practically all host devices are, for example, drivers for hard disks, for graphics devices or for printer devices. As however the hard disk interfaces in common host devices which can be, for example, IBM ~~PCs~~ personal computers (PCs), IBM-compatible PCs, Commodore PCs, Apple computers or even workstations, are the interfaces with the highest data transfer rate, the hard disk driver is utilized in the preferred embodiment of the interface device of the present invention. Drivers for other storage devices such as floppy disk drives, ~~CD-ROM~~ compact disk read-only memory (CD-ROM) drives or tape drives could also be utilized in order to implement the interface device according to the present invention.

5. Replace paragraph [0016] of the specification in its entirety with the following paragraph:

[0016] As described in the following, the interface device according to the present invention is to be attached to a host device by means of a multi-purpose interface of the host device which can be implemented, for example, as an ~~SCSI~~ small computer systems interface (SCSI) interface or as an enhanced printer interface. Multi-purpose interfaces comprise both an interface card and specific driver software for the interface card. The driver software can be designed so that it can replace the ~~BIOS~~ basic input/output system (BIOS) driver routines. Communication between the host device and the devices attached to the multi-purpose interface then essentially takes place by means of the specific driver software for the multi-purpose interface and no longer primarily by means of BIOS routines of the host device. Recently however drivers for multi-purpose interfaces can also already be integrated in the BIOS system of the host device as, alongside classical input/output interfaces, multi-purpose interfaces are becoming increasingly common in host devices. It is of course also possible to use BIOS routines in parallel with the specific driver software for the multi-purpose interface, if this is desired.

6. Replace paragraph [0023] of the specification in its entirety with the following paragraph:

[0023] Communication between the host system or host device and the interface device is based on known standard access commands as supported by all known operating systems

(e.g. ~~DOS-DOS~~<sup>®</sup>, ~~Windows-Windows~~<sup>®</sup>, ~~Unix-Unix~~<sup>®</sup>). Preferably, the interface device according to the present invention simulates a hard disk with a root directory whose entries are "virtual" files which can be created for the most varied functions. When the host device system with which the interface device according to the present invention is connected is booted and a data transmit/receive device is also attached to the interface device 10, usual BIOS routines or multi-purpose interface programs issue an instruction, known by those skilled in the art as the INQUIRY instruction, to the input/output interfaces in the host device. The digital signal processor 13 receives this inquiry instruction via the first connecting device and generates a signal which is sent to the host device (not shown) again via the first connecting device 12 and the host line 11. This signal indicates to the host device that, for example, a hard disk drive is attached at the interface to which the INQUIRY instruction was sent. Optionally, the host device can send an instruction, known by those skilled in the art as "Test Unit Ready", to the interface device to request more precise details regarding the queried device.

7. Replace paragraph [0027] of the specification in its entirety with the following paragraph:

[0027] In addition to the digital signal processor instruction memory, which comprises the operating system of the digital signal processor and can be implemented as an ~~EPR0M~~ erasable programmable read-only memory (EPROM) or ~~EEPROM~~ electrically erasable programmable read-only memory (EEPROM), the memory means 14 can have an additional buffer for purposes of synchronizing data transfer from the data transmit/receive device to the interface device 10 and data transfer from the interface device 10 to the host device.

8. Replace paragraph [0028] of the specification in its entirety with the following paragraph:

[0028] Preferably, the buffer is implemented as a fast random access memory or ~~RAM~~ random access memory (RAM) buffer.

9. Replace paragraph [0030] of the specification in its entirety with the following paragraph:

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.