

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Zenith Electronics Corporation	12/28/1989
RECEIVING PARTY DATA	
Name:	Zenith Data Systems Corporation
Street Address:	Hilltop Road
City:	St. Joseph
State/Country:	MICHIGAN
Postal Code:	49085
PROPERTY NUMBERS Total: 1	
Property Type	Number
Patent Number:	5146578
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ATTORNEY DOCKET NUMBER:	211465-00067
NAME OF SUBMITTER:	John S. Paniaguas
Total Attachments: 7 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif	

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ASSIGNMENT OF U. S. PATENTS AND APPLICATIONS
TO ZENITH DATA SYSTEMS CORPORATION

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, Zenith Electronics Corporation ("ASSIGNOR"), having principal offices at 1000 Milwaukee Avenue, Glenview, Illinois 60025, a Delaware corporation, has assigned and does hereby assign to Zenith Data Systems Corporation ("ASSIGNEE"), having principal offices at Hilltop Road, St. Joseph, Michigan 49085, a Delaware corporation, all of its right, title and interest in and to the U. S. patents and U. S. patent applications identified in the appended Schedules A and B, respectively.

IN TESTIMONY WHEREOF the ASSIGNOR has caused these presents to be signed by its Vice President and General Counsel, and its corporate seal to be hereunto affixed and attested by its VP-Finance this 28th day of DECEMBER, 1989.

ZENITH ELECTRONICS CORPORATION

BY

John Borst, Jr.

Vice President and General Counsel

ATTEST:

[Signature]

STATE OF NEW YORK)
~~ILLINOIS~~) SS
COUNTY OF ~~COOK~~ NEW YORK)

On this 28th day of DECEMBER, 1989, before me personally came John Borst, Jr. to me known and known to me to be the Vice President and General Counsel of the ASSIGNOR above-named, and acknowledged that he executed the foregoing instrument on behalf of said ASSIGNOR and pursuant to authority duly received.

[Signature]
NOTARY PUBLIC
Notary Public, State of New York
No. 30-4861094
Qualified in Nassau County
Certificate filed in New York County
Commission Expires September 30, 1991

REEL 5203 FRAME 471

SCHEDULE A

IMPROVED MAIN MEMORY ACCESS IN A MICROPROCESSOR SYSTEM

Inventors: OLSON ANTHONY M. (US); ROBINSON TOM (US); RAJARAM BABU (US);

Patent No: US 4847758 Issue Date: 890711

DUAL OPERATING SPEED SWITCHOVER ARRANGEMENT FOR CPU

Inventors: JAUREGUI LUIS H (US)

Patent No: US 4821229 Issue Date: 890411

DATA PROCESSING SYSTEM WITH EXTENDED MEMORY ACCESS

Inventors: OLSON ANTHONY M (US); RAJARAM BABU (US)

Patent No: US 4792929 Issue Date: 881220

VIDEO DISPLAY TERMINAL WITH PAGING AND SCROLLING

Inventors: FOSTER MARK J (US)

Patent No: US 4744046 Issue Date: 880510

VIDEO DISPLAY WITH IMPROVED SMOOTH SCROLLING

Inventors: FOSTER MARK J (US)

Patent No: US 4714919 Issue Date: 871222

PIVOTING MOUNT FOR DETACHABLE KEYBOARD

Inventors: FUHS ERIC D (US)

Patent No: US 4704604 Issue Date: 871103

SWITCHCOVER MEANS AND METHOD FOR DUAL MODE MICROPROCESSOR SYSTEM

Inventors: KRAUSE CHARLES A (US); RAJARAM BABU (US); WATZMAN BARRY A (US)

Patent No: US 4702419 Issue Date: 871027

PORTABLE COMPUTER

Inventors: WIENER TIMOTHY J (US)

Patent No: US D291312 Issue Date: 870811

PORTABLE PERSONAL COMPUTER

Inventors: KRENZ HORST M (US)

Patent No: US 4669053 Issue Date: 870526

MULTI-BIT WRITE FEATURE FOR VIDEO RAM

Inventors: KRAUSE CHARLES A (US); RAJARAM BABU (US)

Patent No: US 4620186 Issue Date: 861026

KEYBOARD SCANNING

Inventors: VANDERHEYDEN RANDY J (US); KRAUSE CHARLES A (US)

Patent No: US 4617554 Issue Date: 861014

POWER TRANSITION WRITE PROTECTION FOR PROM
Inventors: OLSON ANTHONY M (US)
Patent No: US 4612632 Issue Date: 860916

CHARACTER ORIENTED RAM MAPPING SYSTEM AND METHOD THEREFOR
Inventors: CHANDLER GREGG (US); RAJARAM BABU (US)
Patent No: US 4594587 Issue Date: 860610

SELECTIVE PAGE DISABLE FOR A VIDEO DISPLAY
Inventors: KRAUSE CHARLES A (US); RAJARAM BABU (US)
Patent No: US 4574277 Issue Date: 860304

VIDEO RAM ACCESSING SYSTEM
Inventors: RAJARAM BABU (US)
Patent No: US 4511965 Issue Date: 850416

PAPER GUIDE FOR LINE PRINTER
Inventors: KOOY WAYNE J (US); KRENZ HORST M (US); UNGER LAWRENCE
C (US)
Patent No: US 4430012 Issue Date: 840207

PRINT HEAD DRIVE BELT TENSIONING MEANS AND METHOD FOR LINE
PRINTER
Inventors: KRENZ HORST M (US)
Patent No: US 4395151 Issue Date: 830726

MEANS AND METHOD FOR COMPENSATING FOR PRINT MEDIUM
THICKNESS IN LINE PRINTERS
Inventors: KRENZ HORST M (US)
Patent No: US 4390292 Issue Date: 830628

REEL 5203 FRAME 473

SCHEDULE B

MOUNTING OF DRAMS OF DIFFERENT SIZES AND PINOUTS WITHIN
LIMITED FOOTPRINT

Inventors: OLSON ANTHONY M (US); RAJARAM BABU (US)
Serial No.: US 294925 Filing Date: 881230

COMBINED PAGED MAIN MEMORY AND CACHE MEMORY SYSTEM

Inventors: OLSON ANTHONY M (US)
Serial No.: US 425444 Filing Date: 891023

METHOD AND APPARATUS FOR STAGGERED REFRESH OF DYNAMIC RANDOM
ACCESS MEMORY

Inventors: BUXTON CLARK (US); KOHTZ ROBERT (US);
LESZCZYNSKI LARRY (US)
Serial No.: US 265154 Filing Date: 881031

BURST REFRESH OF DYNAMIC RANDOM ACCESS MEMORY FOR PERSONAL
COMPUTERS

Inventors: BUXTON CLARK (US); KOHTZ ROBERT (US)
Serial No.: US 114770 Filing Date: 871030

COMPUTER DISK DRIVE CONTROL

Inventors: KOHTZ ROBERT (US); NICOL MARK D (US)
Serial No.: US 208354 Filing Date: 880617

IMPROVED MEMORY USAGE SYSTEM

Inventors: BELT STEVEN (US); KOHTZ ROBERT (US)
Serial No.: US 215651 Filing Date: 880706

IMPROVED COMPUTER OPERATING SYSTEMS INCLUDING TRANSFER OF
ROM TO RAM

Inventors: FOSTER MARK J (US); KOHTZ ROBERT (US); OLSON
ANTHONY M (US); RAJARAM BABU (US); ROBINSON TOM (US)
Serial No.: US 114767 Filing Date: 871030

EXPANDED MEMORY SPECIFICATION MAPPING SCHEME

Inventors: FOSTER MARK J (US); RAJARAM BABU (US); OLSON
ANTHONY M (US)
Serial No.: US 114781 Filing Date: 871030

HIGH SPEED MEMORY FOR MICROPROCESSOR SYSTEM

Inventors: FOSTER MARK J (US)
Serial No.: US 139685 Filing Date: 871030

METHOD FOR IMPROVING TIME PAGE HIT RATIO OF A PAGE MODE MAIN
MEMORY SYSTEM

Inventors: OLSON ANTHONY M (US); RAJARAM BABU (US);
ROBINSON TOM (US)

Serial No.: US 215652 Filing Date: 880706

METHOD FOR IMPROVING THE PAGE HIT RATIO OF A PAGE MODE MAIN
MEMORY SYSTEM WHEN USING A CACHE

Inventors: OLSON ANTHONY M (US)

Serial No.: US 198954 Filing Date: 880526

PORTABLE COMPUTER

Inventors: OJEDA PETER A (US)

Serial No.: US 246493 Filing Date: 880919

RETRACTABLE HANDLE AND LATCH FOR PORTABLE COMPUTERS

Inventors: FUHS ERIC D (US)

Serial No.: US 265110 Filing Date: 881031

KEYBOARD LATCHING ARRANGEMENT FOR PORTABLE COMPUTERS

Inventors: KRENZ HORST M (US)

Serial No.: US 265078 Filing Date: 881031

EXTERNAL EXPANSION BUS INTERFACE

Inventors: BUXTON CLARK (US); FAKHRUDDIN SAIFEE (US);

FOSTER MARK J (US); KOHTZ ROBERT (US); SCHINDLER JEFF (US)

Serial No.: US 260964 Filing Date: 881021

METHOD AND APPARATUS FOR BATTERY-POWER LOAD-COMPENSATION
MONITORING OF BATTERY DISCHARGE

Inventors: FAKHRUDDIN SAIFEE (US); FOSTER MARK J (US)

Serial No.: US 303604 Filing Date: 890127

A REMOVABLE HARD DISK DRIVE HAVING A COMBINATION LATCH LEVER
AND HANDLE

Inventors: KRENZ HORST M (US)

Serial No.: US 265077 Filing Date: 881031

HEAT-EXCHANGE DISPLAY PANEL FOR PORTABLE COMPUTER

Inventors: FUHS ERIC D (US); GRIFFIN WAYNE (US); KOHTZ
ROBERT (US); OJEDA PETER A (US)

Serial No.: US 265180 Filing Date: 881031

IMPROVED SYSTEM CONTROL PROCESSOR AND TECHNIQUE

Inventors: FAKHRUDDIN SAIFEE (US); FOSTER MARK J (US);
KOHTZ ROBERT (US)

Serial No.: US 302483 Filing Date: 890126

REF 5203 FRAME 76

METHOD AND APPARATUS FOR AUTOMATIC MEMORY CONFIGURATION BY A COMPUTER

Inventors: HELM GORDON L (US); MCAULIFFE WILLIAM (US); NICOL MARK D (US); OLSON ANTHONY M (US); WITKOWSKI TODD R (US)

Serial No.: US 301607 Filing Date: 890124

TWO STAGE CACHE MEMORY SYSTEM AND METHOD

Inventors: ZANGENEHPOUR SAIED (US)

Serial No.: US 292189 Filing Date: 881230

METHOD AND APPARATUS FOR ERROR DETECTION AND LOCALIZATION

Inventors: HELM GORDON L (US); NICOL MARK D. (US); OLSON ANTHONY M (US)

Serial No.: US 386340 Filing Date: 890789

PIPELINING OF CACHE ACCESSES

Inventors: OLSON ANTHONY M (US)

Serial No.: (not yet rec'd) Filing Date: 891113

POSTING OF BUS SNOOP WRITES FOR THE PURPOSE OF UPDATING LOCAL CACHE MEMORY

Inventors: OLSON ANTHONY M (US)

Serial No.: US 301218 Filing Date: 890124

CPU LOCK LOGIC FOR CORRECT OPERATION WITH POSTED WRITE ARRAY

Inventors: OLSON ANTHONY M (US)

Serial No.: US 426902 Filing Date: 891025

DYNAMIC PREFETCH FOR CACHE MEMORY

Inventors: ZANGENEHPOUR SAIED (US)

Serial No.: US 345915 Filing Date: 890501

METHOD AND APPARATUS FOR REPLACING DATA IN A CACHE MEMORY

Inventors: ZANGENEHPOUR SAIED (US)

Serial No.: US 292579 Filing Date: 881230

INSTALLATION MECHANISM FOR REMOVABLE COMPUTER DRIVE MODULE

Inventors: KRENZ HORST M (US)

Serial No.: US 306613 Filing Date: 890203

FLUORESCENT BACKLIGHT FLICKER CONTROL IN AN LCD DISPLAY

Inventors: GAUTHIER LLOYD W (US)

Serial No.: US 373017 Filing Date: 890628

SELFALIGNING GUIDE FOR REMOVABLE DISK DRIVE

Inventor: EDING LON (US)

Serial No.: US 365322 Filing Date: 890613

AUTO SENSING KEYBOARD INTERFACE

Inventors: BELT STEVEN (US); RUTHENBECK MARK (US); FOSTER MARK J (US); BARNES BRIAN C. (US); VANDERHEYDEN RANDY J (US)
Serial No.: US 334841 Filing Date: 890407

COMPUTER STAND

Inventors: KRENZ HORST M (US); WAHLENMEIER FRED E (US)
Serial No.: US 333373 Filing Date: 890405

DUAL CONNECTOR PORT FOR BUS MASTER CARD

Inventors: ROBINSON THOMAS N (US); NICOL MARK D (US); OLSON TONY M (US); WITKOWSKI TODD R (US)
Serial No.: (not yet rec'd) Filing Date: 891106

EXTENDED MEMORY ADDRESSING SYSTEM

Inventors: ROBINSON THOMAS N (US)
Serial No.: US 432866 Filing Date: 891106

ANTICIPATORY CACHE READ

Inventors: OLSON ANTHONY M (US)
Serial No.: US 413891 Filing Date: 890929

PROGRAMMABLE CACHE CONTROLLER

Inventors: OLSON ANTHONY M (US)
Serial No.: (not yet rec'd) Filing Date: 891113

PIVOTING MOUNT FOR DETACHABLE KEYBOARD (Reissue)

Inventors: FUHS ERIC D (US)
Serial No.: (not yet rec'd) Filing Date: 891031

PROGRAMMABLE CACHABLE MEMORY AREAS

Inventors: OLSON ANTHONY M (US)
Serial No.: (not yet rec'd) Filing Date: 891113

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Jeff M. Paul
ACTING COMMISSIONER, OF
PATENTS AND TRADEMARK OFFICE